

# BASAVESHWAR ENGG. COLLEGE

## SELF ASSESSMENT REPORT(TIER - I) FOR Information Science & Engg.

### Part A : Institutional Information

#### 1 Name and Address of the Institution

BASAVESHWAR ENGG. COLLEGE,  
S.NIJALINGAPPA VIDYANAGAR

#### 2 Name and Address of Affiliating University

VISVESVARAYA TECH. UNIVERSITY BELGAUM,KARNATAKA STATE

#### 3 Year of establishment of the Institution:

1963/1994

#### 4 Type of the Institution:

- |  |   |
|--|---|
| <input type="radio"/> Institute of National Infortance | <input checked="" type="radio"/> Autonomous     |
| <input type="radio"/> University                       | <input type="radio"/> Any other(please specify) |
| <input type="radio"/> Deemed University                |   |

#### 5 Ownership Status:

- |  |  |
|--|--|
| <input type="radio"/> Central Government | <input checked="" type="checkbox"/> Trust          |
| <input type="radio"/> State Government   | <input type="checkbox"/> Society                   |
| <input type="radio"/> Government Aided   | <input type="checkbox"/> Section 25 Company        |
| <input type="radio"/> Self financing     | <input type="checkbox"/> Any Other(Please Specify) |

#### 6 Other Academic Institutions of the Trust/Society/Company etc., if any

Name of Institutions	Year of Establishment	Programs of Study	Location
Sanskrit Patha Shala	1906	School	Bagalkot
Akkanabalaga Pre-Primary	1963	School	Bagalkot
Basappaanna Palled Pre-Prii	1985	School	Bagalkot
Sangameshwar Pre-Primari	1995	School	Kudal Sangam
Basaveshwar Pre-Primary s	1997	School	Bagalkot
Basaveshwar Pre-Primary s	1998	School	Ramdurga
Basaveshwar Pre-Primary s	1999	School	Bagalkot
Basaveshwar Pre-Primary s	1999	School	Mudhol
Basaveshwar Pre-Primary s	2002	Pre-Primary School	Basava Hanchinal
Sri Gurubasava Pre-Primari	2004	Pre-Primary School	Bilur
Basaveshwar Pre-Primary s	2006	Pre-Primary School	Anagwadi
Jyoti Pre-Primary school	1994	Pre-Primary School	Jambagi
Basappaanna Palled Primary	1986	Primary School	Bagalkot
Sangameshwar Primary Sc	1995	Primary School	Kudal Sangam
Basaveshwar Primary scho	1997	Primary School	Bagalkot
Basaveshwar Primary scho	1998	Primary School	Ramdurga
Basaveshwar Primary scho	1999	Primary School	Bagalkot
Basaveshwar Primary scho	1999	Primary School	Mudhol
Basaveshwar Primary scho	2003	Primary School	Basava Hanchinal
Sri Gurubasava Primary scl	2005	Primary School	Bilur
Jyoti Primary school	1994	Primary School	Kasaba Jambagi
Basaveshwar High School	1917	High School	Bagallkot
R M G High School	1949	High School	Mudhol
State High School	1949	High School	Ramdurga
Sangameshwar High Schoc	1962	High School	Kudal Sangam
New Girls High School	1966	High School	Mudhol
New Girls High School	1966	High School	Ramdurga
Basaveshwar Girls High Sc	1972	High School	Bagallkot
Basappaanna Palled High Sc	1996	High School	Bagallkot
Basaveshwar High School	2001	High School	Kasaba Jambagi



Sri Gourishankar High Schc	2002	High School	Kirsur
Basaveshwar High School	2002	High School	Baragi
M S S High School	2002	High School	Mullur
D C C High School	2002	High School	Mudenur
Basaveshwar Girls High Sc	2003	High School	Lokapur
B C Kalahal High School	2004	High School	Kakanur
Basaveshwar High School	2004	High School	Anagwadi
Kadasiddeshwar High Scho	2004	High School	Guledgudd
Gurumanteshwar High Schc	2006	High School	Kelur
Sri Murughendra High Schc	2006	High School	Jath
Basaveshwar English Medit	2006	High School	Ramdurga
Basaveshwar English Medit	2007	High School	Bagalkot
Basaveshwar International I	2001	High School	Bagalkot
Basaveshwar, Pre-Universit	1972	Degree	Bagalkot
R.M.G Pre-University Colle	1972	Degree	Mudhol
State Pre-University Colleg	1972	Degree	Ramdurga
Sangameshwar Pre-Univer	1991	Degree	Kudal Sangam
B.V.V.S Swatantra Arts and	2003	Degree	Bagalkot
Ramakrishna Paramahansa	2005	Degree	Salahalli
B.V.V.S. Women's Arts and	2006	Degree	Mudhol
Basaveshwar D.Ed. College	1942	Degree	Bagalkot
Basaveshwar School of Phy	1981	Education	Bagalkot
B.V.V.S., D.Ed College	2004	Degree	Mudhol
B.V.V.S., D.Ed College	2004	Degree	Ramdurga
Basaveshwar Arts College	1944	Degree	Bagalkot
B.V.V.S Research Centre (K	2010	PG	Bagalkot
Basaveshwar Science Colle	1967	PG	Bagalkot
MLTC Basaveshwar Scienc	1992	Hospital	Bagalkot
B.V.V.S., B.C.A	2000	Degree	Bagalkot
Basaveshwar Commerce C	1970	Degree	Bagalkot
P.G.Course	2001	PG	Bagalkot

PG Course (Kannada)	1999	PG	Bagalkot
PG Course (English)	2002	PG	Bagalkot
PG Course	2002	PG	Bagalkot
S.R.Kanthi Arts ,Commerce	1982	Degree	Bagalkot
Akkamahadevi Women's Ar	2000	Degree	Bagalkot
Basaveshwar College of Ph	1981	BPED	Bagalkot
P.G.Course(MPED)	2002	PG	Bagalkot
S.C.Nandimath Law Colleg	1986	LLB & LLM	Bagalkot
P.G.Course(LLM)	2002	Law	Bagalkot
B.V.V.S College of Educatio	2004	Education	Bagalkot
B.V.V.S College of Educatio	2009	Education	Bagalkot
B.V.V.S Polytechnic(Autono	1958	Diploma	Bagalkot
Basaveshwar Engineering (	1963	B.E, M.Tech & P.hD	Bagalkot
B.V.V.S Institute of Manage	1998	PG	Bagalkot
S.R. Vastrad Rural Polytech	1984	Diploma	Guledgudda
B.V.V.S Community Polytec	1986	Dip. In Engg	Bagalkot
S. R.Vastrad Community Pc	2002	Diploma	Guledgudda
B.V.V.S ITI	2003	ITI	Bagalkot
Amruta Institute of Engineer	2007	BE & MBA	Bangalore
Bilur Gurubasav Mahaswan	2013	BE	Mudhol
Hanagal Kumareshwar Sch	1980	MBBS	Bagalkot
P M Nadagouda Memorial I	1987	DENTAL	Bagalkot
Hanagal Kumareshwar Coll	1992	MS	Bagalkot
Sajjalshree Diploma in Gen	1999	Nursing	Bagalkot
Kittur Rani Channamma Nu	2002	Nursing	Jamakhandi
B.V.V.S Ayurved Medical Cc	1998	Ayurvedic	Bagalkot
Sajjalshree College of Nurs	1999	Nursing	Bagalkot
IGNO P.C.B.Sc. Nursing Co	2002	Degree	Bagalkot
S Nijalingappa Medical Coll	2002	MBBS	Bagalkot
B.V.V.S Nursing School	2004	Nursing	Mudhol
B.V.V.S Nursing School	2004	Nursing	Ramdurga

Dental Hospital and Resear	1988	BDS & MDS	Bagalkot
B.V.V.S Ayrvedic Hospital a	1998	BAMS	Bagalkot
Hanagal Kumareshwar Hos	2000	MBBS & MD,Ph.D	Bagalkot
B.V.V.S, Blood Bank	2002	-	Bagalkot
Basava Academy of Gener	1996	-	Bagalkot
B.V.V.S Akkanabalaga	1938	Social Service	Bagalkot
Karnataka State Open Univ	1997	Degree	Bagalkot
Indira Gandhi National Ope	2000	Degree	Bagalkot
Basava Human Resource C	1998	Training	Bagalkot
Science and Technology En	1998	S.T.E.P	Bagalkot
B.V.V.S Consultancy	1998	-	Bagalkot
Rural Development Founda	1999	Social Service	Bagalkot
B.V.V.S ING Vysya Bank RL	2003	Training	Bagalkot
B.V.V.S Production and Trai	2001	Training	Bagalkot
B.V.V.S Driving School, Bag	1999	--	Bagalkot
B.V.V.S Driving School, Bag	2000	--	Bagalkot
Akkamahadevi Tailoring ins	2002	Self Empl	Bagalkot
Akkanagamma Tailoring ins	2002	Self Empl	Bagalkot
Gangambike Tailoring institi	2004	Self Empl	Mudhol
Nilambike Tailoring institute	2004	Self Empl	Kudal Sangam
Basavaling Offset printers	1920	Printing Press	Bagalkot
Vairagyada Mallanaraya Pr	2002	Printing Press	Bagalkot
Bagalkot City Sports Club	1924	-	Bagalkot
Working Women's Hostel	1996	-	Bagalkot
Jana Shikshan Centre	2004	-	Bagalkot
Sri Warad Mallappa Free B	1911	Hostel	Bagalkot
B. V. Bhumaraddi Hostel	1942	Hostel	Bagalkot
Jagadguru Jayadev Hostel	1951	Hostel	Bagalkot
Polytechnic Hostel	1962	Hostel	Bagalkot
B.E College Vishweshwarai	1968	Hostel	Bagalkot
B.E College Netaji Subhash	1968	Hostel	Bagalkot

B.V.V.S Girls Hostel No.1	1978	Hostel	Bagalkot
B.V.V.S Girls Hostel No.2	2007	Hostel	Bagalkot
Dental College Gents Hoste	1987	Hostel	Bagalkot
Kittur Rani Channamma La	2005	Hostel	Bagalkot
B.E College Ladies Hostel	1996	Hostel	Bagalkot
B.E College Malaprabha La	2005	Hostel	Bagalkot
Physical Education College	1997	Hostel	Bagalkot
Physical Education College	2001	Hostel	Bagalkot
S Nijalingappa Medical Coll	2002	Hostel	Bagalkot
S Nijalingappa Medical Coll	2002	Hostel	Bagalkot
Sajjalshri Nursing College L	2005	Hostel	Bagalkot
Sajjalshri Nursing College C	2005	Hostel	Bagalkot
S Nijalingappa Medical Coll	2007	Hostel	Hostel
S Nijalingappa Medical Coll	2007	Hostel	Bagalkot
Nilambika Ladies Hostel	2009	Hostel	Bagalkot

**7 Details of all the programs being offered by the Institution under consideration:**

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
Information Science and Engineering	UG	1999	1999	30	Yes	90	Granted accreditation for 3 years for the period (specify period)	2018	2021	Yes	4
Mechanical Engineering	UG	1963	1963	30	Yes	120	Granted accreditation for 3 years for the period (specify period)	2019	2022	No	4
Artificial Intelligence and Machine Learning	UG	2020	2020	60	No	60	Not eligible for accreditation	--	--	No	4
Biotechnology	UG	2002	2002	30	No	30	Granted accreditation for 3 years for the period (specify period)	2018	2021	No	4
Electronics and Communication Engineering	UG	1985	1985	40	Yes	120	Granted accreditation for 3 years for the period (specify period)	2019	2022	No	4
Electrical & Electronics Engineering	UG	1963	1963	30	Yes	60	Granted accreditation for 3 years for the period (specify period)	2018	2022	No	4

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
Digital Communication	PG	2004	2004	18	No	18	Granted provisional accreditation for two years for the period(specify period)	2017	2019	No	2
Master in Business Applications	PG	2009	2009	60	No	60	Eligible but not applied	--	--	No	2
Energy Science and Technology	PG	2020	2020	18	No	18	Not eligible for accreditation	--	--	No	2
Food Biotechnology	PG	2020	2020	18	No	18	Not eligible for accreditation	--	--	No	2
Defence Technology	PG	2021	2021	24	No	24	Not eligible for accreditation	--	--	No	2
Structural Engineering	PG	1994	1994	18	No	18	Applying first time	--	--	No	2
Environmental Engineering	PG	2003	2003	18	No	18	Applying first time	--	--	No	2
Geotechnical Engineering	PG	1994	1994	18	No	18	Applying first time	--	--	No	2
Civil Engineering	UG	1963	1963	30	Yes	120	Granted accreditation for 3 years for the period (specify period)	2019	2022	No	4
Computer Science and Engineering	UG	1984	1984	30	Yes	120	Granted accreditation for 3 years for the period (specify period)	2019	2022	No	4
<b>Sanctioned Intake for Last Five Years for the Computer Science and Engineering</b>											
<b>Academic Year</b>						<b>Sanctioned Intake</b>					
2021-22						120					
2020-21						90					
2019-20						90					
2018-19						90					
2017-18						90					
2016-17						90					
Industrial and Production Engineering	UG	1984	1984	30	No	30	Granted accreditation for 3 years for the period (specify period)	2019	2022	No	4

#### 8 Programs to be considered for Accreditation vide this application:

S No	Level	Discipline	Program
1	Post Graduate	Engineering & Technology	Computer Science & Engg.
2	Post Graduate	Engineering & Technology	Machine Design
3	Under Graduate	Engineering & Technology	Information Science & Engg.

## 9 Total number of employees

### A. Regular\* Employees (Faculty and Staff):

Items	2021-22		2020-21		2019-20	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	101	109	102	110	111	115
Faculty in Engineering (Female)	49	50	49	49	50	50
Faculty in Maths, Science & Humanities teaching in engineering program (Male)	12	13	13	13	13	16
Faculty in Maths, Science & Humanities teaching in engineering program (Female)	06	07	07	08	08	09
Non-teaching staff (Male)	182	185	185	195	193	200
Non-teaching staff (Female)	25	25	25	26	26	28

### B. Contractual\* Employees (Faculty and Staff):

Items	2021-22		2020-21		2019-20	
	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering (Male)	00	00	00	00	00	00
Faculty in Engineering (Female)	00	00	00	00	00	00
Faculty in Maths, Science & Humanities teaching in engineering Programs (Male)	00	00	00	00	00	00
Faculty in Maths, Science & Humanities teaching in engineering Programs (Female)	00	00	00	00	00	00
Non-teaching staff (Male)	00	00	00	00	00	00
Non-teaching staff (Female)	00	00	00	00	00	00

## 10 Total number of Engineering students:

Engineering and Technology- UG	<input checked="" type="checkbox"/> Shift1	<input type="checkbox"/> Shift2
Engineering and Technology- PG	<input checked="" type="checkbox"/> Shift1	<input type="checkbox"/> Shift2
Engineering and Technology- Polytechnic	<input type="checkbox"/> Shift1	<input type="checkbox"/> Shift2
MBA	<input checked="" type="checkbox"/> Shift1	<input type="checkbox"/> Shift2
MCA	<input type="checkbox"/> Shift1	<input type="checkbox"/> Shift2

**Engineering and Technology- UG Shift-1**

Course Name	2021-22	2020-21	2019-20
Total no. of Boys	1697	1701	1691
Total no. of Girls	1415	1223	1224
<b>Total</b>	<b>3112</b>	<b>2924</b>	<b>2915</b>

**Engineering and Technology- PG Shift-1**

Course Name	2021-22	2020-21	2019-20
Total no. of Boys	47	66	69
Total no. of Girls	43	57	61
<b>Total</b>	<b>90</b>	<b>123</b>	<b>130</b>

**Engineering and Technology- MBA Shift-1**

Course Name	2021-22	2020-21	2019-20
Total no. of Boys	43	32	33
Total no. of Girls	45	39	41
<b>Total</b>	<b>88</b>	<b>71</b>	<b>74</b>

**11 Vision of the Institution:**

To be recognized as a premier technical institute committed to developing exemplary professionals, offering research based innovative solutions and inspiring inventions for holistic socio-economic development.

**12 Mission of the Institution:**

To pursue excellence through student centric dynamic teaching-learning processes,encouraging freedom of inquiry and openness to change.

To carry out innovative cutting edge research and transfer technology for industrial and societal needs.

To imbibe moral and ethical values and develop compassionate, humane professionals.

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**13 Contact Information of the Head of the Institution and NBA coordinator, if designated:**

Head of the Institution	
Name	Dr. S. S. Injaganeri
Designation	Principal
Mobile No.	9481228825
Email ID	injaganeri@gmail.com

**☒ NBA Coordinator, If Designated**

Name	Dr. Anil D. Devangavi
Designation	Professor
Mobile No.	9342186108
Email ID	anildevangavi_s@yahoo.co.in

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## PART B: Criteria Summary

Criteria No.	Criteria	Total Marks	Institute Marks
1	VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES	50	50.00
2	PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES	100	100.00
3	COURSE OUTCOMES AND PROGRAM OUTCOMES	175	175.00
4	STUDENTS' PERFORMANCE	100	86.52
5	FACULTY INFORMATION AND CONTRIBUTIONS	200	149.32
6	FACILITIES AND TECHNICAL SUPPORT	80	80.00
7	CONTINUOUS IMPROVEMENT	75	75.00
8	FIRST YEAR ACADEMICS	50	46.62
9	STUDENT SUPPORT SYSTEMS	50	50.00
10	GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES	120	120.00
	<b>Total</b>	<b>1000</b>	<b>933</b>

### Part B : Criteria Summary

1 VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (50)

Total Marks 50.00

1.1 State the Vision and Mission of the Department and Institute (5)

Total Marks 5.00

Vision of the institute	To be recognized as a premier technical institute committed to developing exemplary professionals, offering research based innovative solutions and inspiring inventions for holistic socio-economic development.								
Mission of the institute	<p>To pursue excellence through student centric dynamic teaching-learning processes,encouraging freedom of inquiry and openness to change.</p> <p>To carry out innovative cutting edge research and transfer technology for industrial and societal needs.</p> <p>To imbibe moral and ethical values and develop compassionate, humane professionals.</p>								
Vision of the Department	To be a Global Premier Center of Education and Research in Information Science and Engineering								
Mission of the Department	<table border="1"> <thead> <tr> <th>Mission No.</th><th>Mission Statements</th></tr> </thead> <tbody> <tr> <td>M1</td><td>To impart quality engineering education developing ethical,</td></tr> <tr> <td>M2</td><td>To carry out interdisciplinary research to fulfill the needs of various sections of society including government, private organizations.</td></tr> <tr> <td>M3</td><td>To create exemplary young professionals who will promote sustainable development.</td></tr> </tbody> </table>	Mission No.	Mission Statements	M1	To impart quality engineering education developing ethical,	M2	To carry out interdisciplinary research to fulfill the needs of various sections of society including government, private organizations.	M3	To create exemplary young professionals who will promote sustainable development.
Mission No.	Mission Statements								
M1	To impart quality engineering education developing ethical,								
M2	To carry out interdisciplinary research to fulfill the needs of various sections of society including government, private organizations.								
M3	To create exemplary young professionals who will promote sustainable development.								

### 1.2 State the Program Educational Objectives (PEOs) (5)

Total Marks 5.00

Institute Marks : 5.00

PEO No.	Program Educational Objectives Statements
PEO1	To provide students with strong foundation in mathematics, science, and engineering fundamentals
PEO2	To provide exposure to emerging cutting edge information and communication technologies for achieving excellence in global Information Technology industry.
PEO3	To equip students with the spirit of innovation to carry research type projects to fulfill the changing needs of the society.
PEO4	To inculcate team work, leadership qualities and entrepreneurial, and communication skills among students.
PEO5	To motivate & nurture the students to pursue higher education, involve in lifelong learning, be socially responsible & morally upright Information Technology professionals.

### 1.3 Indicate where the Vision, Mission and PEOs are published and disseminated among stakeholders (15)

Total Marks 15.00

**The Vision, Mission and PEOs of the institute/department are published and disseminated:**

- Published on our institution website (www.becbgk.edu), curricula books, and BEC rules and regulations books.
- Displayed in HOD chamber, classrooms, and other prominent places of the department.
- Communicated to parents through student's progress report and to all other stake holders through seasonal greeting cards.
- Discussed during student and staff meetings, governing council meetings, and academic council meetings.
- Communicated through college/department brouchers, letterheads, newsletters, magazines, etc.
- Communicated through banners and brouchers of international/national/state level conferences, workshops, seminars, symposia and student technical fests organized by institute/departments.
- The PEO's are published on the college website (www.becbgk.edu) and in curricula and course hand books.
- The PEO's are communicated to parents, alumni through meetings scheduled regularly & to all other stake holders through Emails.
- The PEO's are displayed in HOD chamber and prominent places of the department.
- Vision, Mission and PEOs are published in the project diaries.

**1.4 State the process for defining the Vision and Mission of the Department, and PEOs of the program (15)**

Total Marks 15.00

Institute Marks : 15.00

**The Process for defining the Vision and Mission of the Department:**

Brain storming sessions were conducted to define vision and mission of the department with the help of the stakeholders like Parents, Staff Members, Students, Alumni, and Subject Experts. Suggestions and feedback from Industry Experts were also considered. The vision and mission statements are reviewed and approved by Board of Studies (BoS), Academic Council and Board of Governing (BoG).

The process for defining the vision and mission of the department is as shown in Figure 1.1

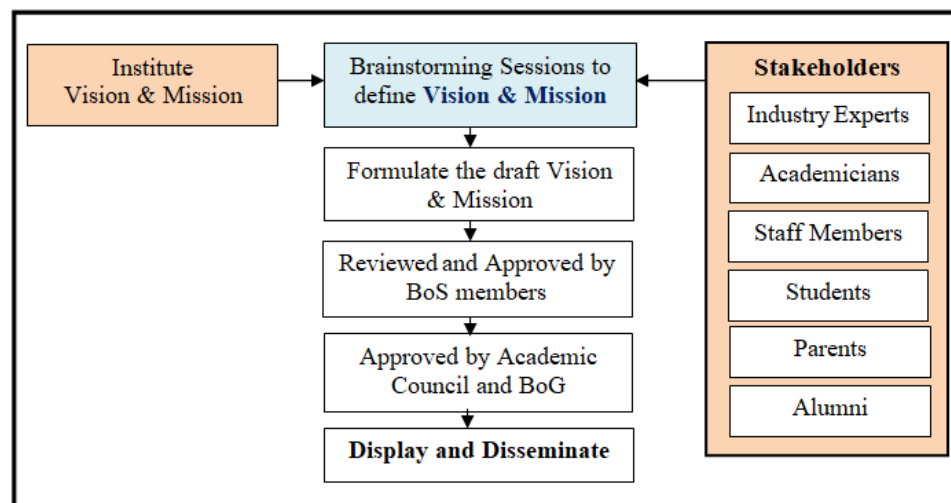


Figure 1.1. Process for defining Vision and Mission of the department.

**The process for defining the PEOs of the Department:**

For defining the PEOs of the department, PEO's were established by the following process:

- The PEO are formulated through a series of meetings by faculty and stakeholders. PEOs thus formulated are reviewed and approved by BoS, AC, and BoG.
- The PEOs were formulated in tune with the vision and mission statements of the Institute and the department.
- The PEOs thus formulated, reflect the stakeholders' expectations about the attributes, the graduates of the programme should demonstrate.
- The PEOs will be formally reviewed once in five years to meet the changing needs of the IT Industry and other stakeholders.

The process involved in defining PEOs of the program is as shown in Figure 1.2.

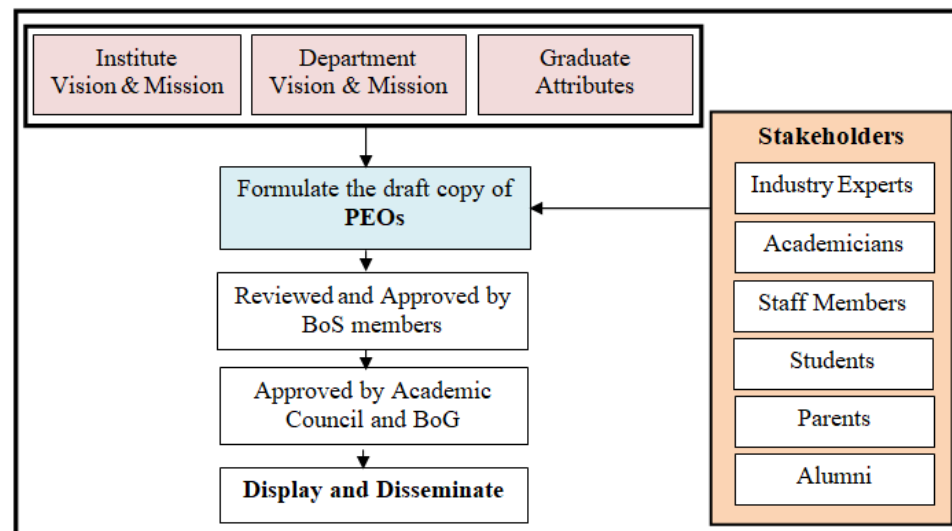


Figure 1.2. Process for defining PEOs of the program.

### 1.5 Establish consistency of PEOs with Mission of the Department (10)

Total Marks 10.00

Institute Marks : 10.00

#### Process for mapping PEOs with Mission of the department

The process of defining the PEOs and mapping to the Mission elements involved all stakeholders viz. senior faculty of the Institute, Senior faculty of the department, Industry representatives, Parent representatives, Alumni and Student representatives.

Hence, there is sufficient involvement of the stake holders in the process. To comply with the observation, the mapping of PEOs with mission of the department has been revised and strengthened.

PEO Statements	M1	M2	M3
To provide students with strong foundation in mathematics, science, and engineering fundamentals	3	3	1
To provide exposure to emerging cutting edge information and communication technologies for achieving excellence in global Information Technology industry.	2	3	1
To equip students with the spirit of innovation to carry research type projects to fulfill the changing needs of the society.	2	3	1
To inculcate team work, leadership qualities and entrepreneurial, and communication skills among students.	3	3	1
To motivate & nurture the students to pursue higher education, involve in lifelong learning, be socially responsible & morally upright Information Technology professionals.	1	2	3

## 2 PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES (100)

Total Marks 100.00

### 2.1 Program Curriculum (30)

Total Marks 30.00

#### 2.1.1 State the process for designing the program curriculum (10)

Institute Marks : 10.00

The department designs its program curriculum based on the vision and mission of the institution and department. The process for designing the curriculum involves all the stakeholders and is outlined below:

- The process for revising the program curriculum includes department meetings involving the faculty and collecting opinions and feedback from various stakeholders like academicians, industrial experts, alumni, parents, faculty, and students
- A Brainstorming is done on program Educational Objectives (PEOs) and Program Specific Outcomes (PSOs).
- The curriculum is designed to offer the courses in orderly manner keeping in view of the prerequisites of courses, Program Educational Objectives (PEOs) and Program specific objectives (PSOs).
- Accordingly the program curriculum is designed by mapping with PEOs and POs and the program specific criteria of ACM/IEEE curricula by a sub-committee of faculty. This is deliberated in the department council meetings and a draft curriculum is prepared.
- The draft curriculum is taken to the BOS meeting where detailed deliberations on revision are done and accepted with or without modifications.
- The revised program curriculum is verified and approved by the academic council.

The Flow chart for design/ revision of Program Curriculum of department is as shown in Figure 2.1

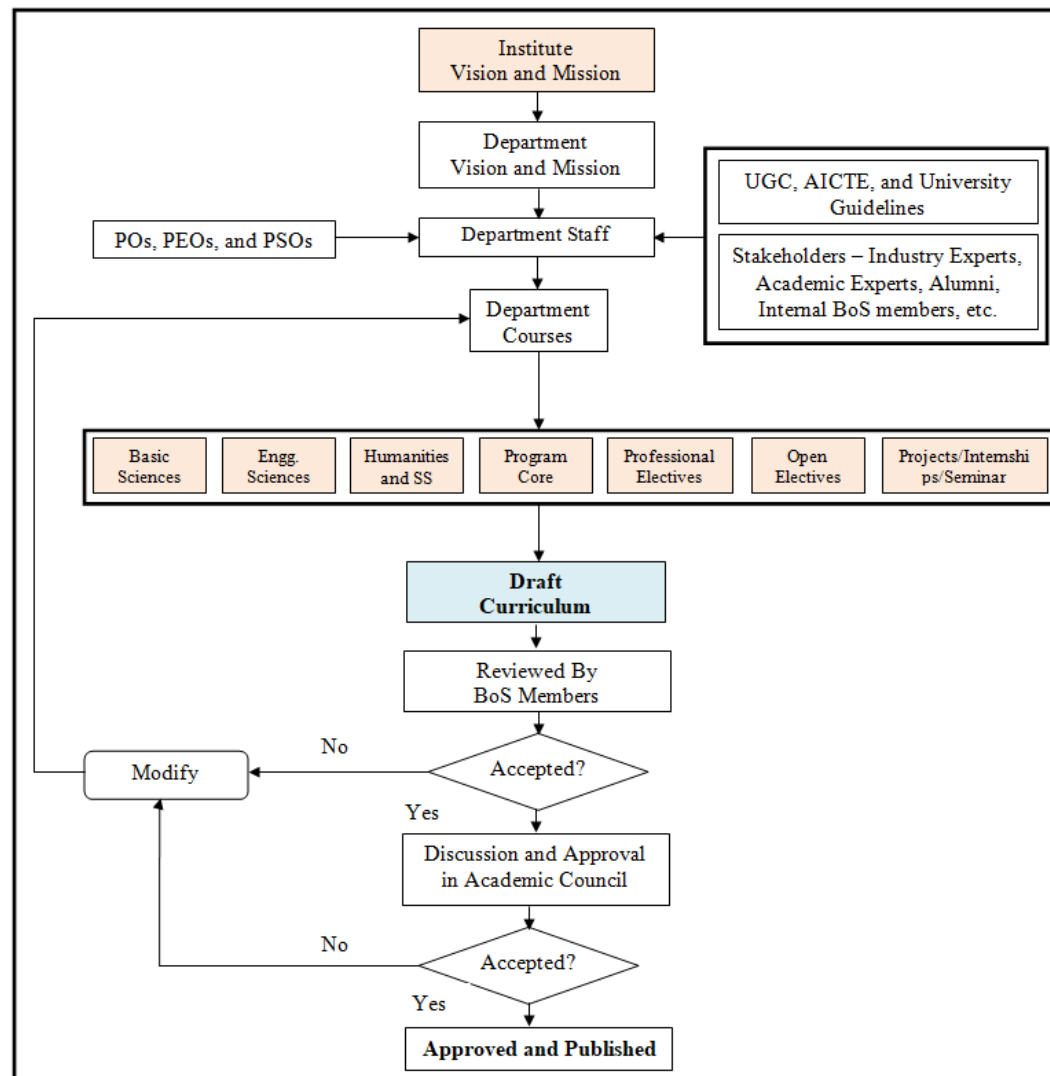


Figure 2.1. The process for designing the program curriculum

## 2.1.2 Structure of the Curriculum (5)

Institute Marks : 5.00

ID	Course Code	Course Title	Lecture (L)	Tutorial (T)	Practical (P)	Total Hours	Theory Credits	Practical Credits	Total Credits
1	UMA161C	Engineering Mathematics-I	3	2	0	5	4	0	4
2	UPH162C	Engineering Physics	3	2	0	5	4	0	4
3	UME163C	Elements of Mechanical Engineering	2	2	0	4	3	0	3
4	UEE164C	Basic Electrical Engineering	2	2	0	4	3	0	3
5	UCS165C	Programming With C	3	0	0	3	3	0	3
6	UHS126M	Constitution of India	2	0	0	2	0	0	0
7	UPH166L	Engineering Physics Laboratory	0	0	3	3	0	1.5	1.5
8	UCS167L	C Programming Laboratory	0	0	3	3	0	1.5	1.5
9	UMA261C	Engineering Mathematics-II	3	2	0	5	4	0	4
10	UCH268C	Engineering Chemistry	3	2	0	5	4	0	4
11	UEC269C	Basic Electronics	2	2	0	4	3	0	3
12	UCV270C	Engineering Mechanics	2	2	0	4	3	0	3
13	UBT233M	Environmental Studies	2	0	0	2	0	0	0
14	UME271L	Computer Aided Engineering Graphics	1	0	3	4	0	2.5	2.5
15	UCH272L	Engineering Chemistry Laboratory	0	0	3	3	0	1.5	1.5
16	UBE273L	Basic Engineering Laboratory	0	0	4	4	0	2	2
17	UHS274k	English for Engineers	2	0	0	2	0	0	0
18	UMA336C	Computational Methods in Computer science	3	0	0	3	3	0	3
19	UIS309C	Discrete Mathematical Structures	3	0	0	3	3	0	3
20	UIS315C	Data Structures and Algorithms	3	2	0	5	4	0	4
21	UIS303C	Logic Design	3	2	0	5	4	0	4

22	UIS314C	Computer Organization	4	0	0	4	4	0	4
23	UIS313L	Advanced C Programming Lab	0	2	2	4	0	2	2
24	UIS312L	Logic Design & Simulation Laboratory	0	0	3	3	0	1.5	1.5
25	UIS308L	Data Structures Laboratory	0	0	3	3	0	1.5	1.5
26	UMA436C	Statistics and Probability Theory	3	0	0	3	3	0	3
27	UIS409C	Microcontroller and Embedded Systems	3	0	0	3	3	0	3
28	UIS424C	OOPs with Java	4	0	0	4	4	0	4
29	UIS416C	Theoretical Foundations of Computer Science	3	2	0	5	4	0	4
30	UIS403C	Analysis and Design of Algorithms	3	2	0	5	4	0	4
31	UHS001N	Fundamentals of Quantitative Aptitude & Soft Skills	2	0	0	2	1	0	1
32	UIS421L	Analysis of Algorithms using JAVA Laboratory	0	1	2	3	0	1.5	1.5
33	UIS410L	Microcontroller and Embedded Systems Laboratory	0	0	3	3	0	1.5	1.5
34	UIS509C	Operating Systems	3	0	0	3	3	0	3
35	UIS510C	Software Engineering	3	0	0	3	3	0	3
36	UIS503C	Database Management Systems	3	2	0	5	4	0	4
37	UIS508C	Advanced Java Programming	3	0	0	3	3	0	3
38	UIS0XXE	Professional Elective – I	3	0	0	3	3	0	3
39	UIS514H	Management & Entrepreneurship	3	0	0	3	3	0	3
40	UIS511L	Database Application Laboratory	0	0	3	3	0	1.5	1.5
41	UIS512L	Advanced JAVA Programming laboratory	0	1	2	3	0	1.5	1.5
42	UHS002N	Advanced Quantitative Aptitude And Soft Skills	1	0	0	1	1	0	1
43	UIS610C	Web Programming	3	2	0	5	4	0	4
44	UIS603C	Computer Networks	3	0	0	3	3	0	3
45	UIS0XXE	Professional Elective-II	3	0	0	3	3	0	3

46	UIS0XXE	Professional Elective – III	3	0	0	3	3	0	3
47	UIS0XXN	Open Elective– I	3	0	0	3	3	0	3
48	UIS612L	Computer Networks Laboratory	0	0	3	3	0	1.5	1.5
49	UIS611L	Web Programming Lab	0	0	3	3	0	1.5	1.5
50	UIS615P	Mini Project	0	0	3	3	0	3	3
51	UHS003N	Career Planning and Professional Skills	2	0	0	2	1	0	1
52	UIS720C	Object Oriented Modeling and Design	3	0	0	3	3	0	3
53	UIS718C	Software Project Management	3	0	0	3	3	0	3
54	UIS0XXE	Professional Elective- IV	3	0	0	3	3	0	3
55	UIS0XXE	Professional Elective- V	3	0	0	3	3	0	3
56	UIS0XXN	Open Elective– II	3	0	0	3	3	0	3
57	UIS707L	Object Oriented System Design Lab	0	0	3	3	0	1.5	1.5
58	UIS716L	Software Testing Lab	0	0	3	3	0	1.5	1.5
59	UIS717P	Project Phase – I	0	0	5	5	0	5	5
60	UIS718I	Internship	0	0	4	4	0	2	2
61	UIS0XXE	Professional Elective – VI	3	0	0	3	3	0	3
62	UIS0XXE	Professional Elective – VII	3	0	0	3	3	0	3
63	UIS806P	Project Phase – II	0	0	12	12	0	12	12
64	UIS807S/UIS808	Seminar/Online Course	0	0	2	2	0	1	1
		<b>Total</b>	<b>121</b>	<b>32</b>	<b>72</b>	<b>225</b>	<b>126</b>	<b>49.0</b>	<b>175.0</b>

## 2.1.3 State the components of the curriculum (5)

Institute Marks : 5.00



Course Components	Curriculum Content (% of total number of credits of the program )	Total number of contact hours	Total number of credits
Basic Sciences	14.28	26.00	25
Engineering Sciences	12.00	30.00	21
Humanities and Social Scie	3.43	9.00	6
Program Core	41.71	96.00	73
Program Electives	12.00	21.00	21
Open Electives	3.43	6.00	6
Project(s)	11.42	20.00	20
Internships/Seminars	1.71	3.00	3
Any other (Please specify)	0.00	0.00	0
<b>Total number of Credits</b>			<b>175</b>

**2.1.4 State the process used to identify extent of compliance of the curriculum for attaining the Program Outcomes and Program Specific Outcomes as mentioned in Annexure I (10)**

Institute Marks : 10.00

The feedback from alumni, faculty, and students is collected and carried out the gap analysis is. The process used to identify extent of compliance of the curriculum is as shown in Figure 2.2.

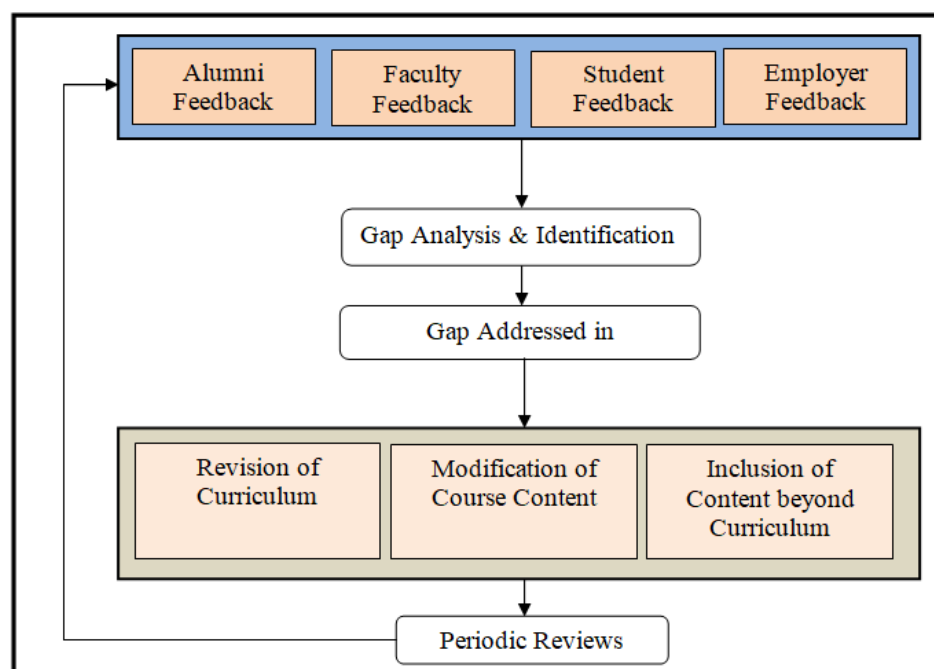


Figure 2.2. The process used to identify extent of compliance of the curriculum

Based on the gaps identified the following measures are considered:

1. Revision of curriculum
2. Content modification within curriculum
3. Beyond curriculum activities like SDP, guest lectures, workshops, competitions, webinars, etc.
4. EAP for weak students.

The course components are designed to meet the compliance of the curriculum for attaining the POs and PSOs. The mapping has been made based on the correlation levels like 3-High, 2-Moderate, and 1- Low levels. The attainment of POs and PSOs are calculated through direct and indirect assessment methods. The substantial mapping of the course components with POs & PSOs is as shown in Table 2.1.

Table 2.1. The substantial mapping of the course components with POs &amp; PSOs

Course Components	Programme Outcomes												Program Specific Objectives		
	Engineering knowledge	Problem analysis	Design/development of solutions	Conducting investigations of complex problems	Modern tool usage	The engineer and society	Environment and sustainability	Ethics	Individual and team work	Communication	Project management and finance	Life0long learning	Engineering fundamentals	Information and Communication Technology Solutions	Ethical, Social and Professional Responsibilities and Lifelong learning
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Basic Sciences	3	3	1	1	0	0	0	0	0	0	0	0	3	2	1
Engineering Sciences	3	3	1	1	0	0	0		0	0	0	0	3	2	1
Humanities and Social Sciences	1	3	1	1	0	3	3	3	3	3	1	3	1	3	3
Program Core	2	2	3	2	2	1	1	1	1	1	1	2	2	3	2
Program Electives	2	2	2	2	2	1	1	1	1	1	1	1	2	3	2
Open Electives	2	2	2	2	2	1	1	1	1	1	1	1	2	3	2
Project(s)	2	3	3	3	2	2	2	3	3	3	3	2	2	3	2
Internships	2	3	3	3	3	2	2	3	3	3	3	2	1	3	2
Seminar	1	3	0	1	3	3	0	3	1	3	0	1	1	3	3
Online	1	1	2	2	1	1	0	0	1	0	0	3	1	1	3

**2.2 Teaching-Learning Processes (70)**

Total Marks 70.00

**2.2.1 Describe Processes followed to improve quality of Teaching & Learning (15)**

Institute Marks : 15.00

The faculty of the department adopts various innovative Teaching & Learning methodologies to create the best learning environment for the students. These methodologies include traditional chalk & talk methods, presentations, video lecturing, and collaborative learning methods. Every concept is explained with real world illustrations, design, and problematic aspects. All faculty members are oriented towards Outcome Based Education (OBE) and are actively utilizing the OBE to cater the learning needs of students by innovative ways. The lecture Session duration is 60 minutes. Laboratory duration is 120/180 minutes. Assignments are given to students for their better performance. The process of teaching - learning is as shown in figure 2.3.

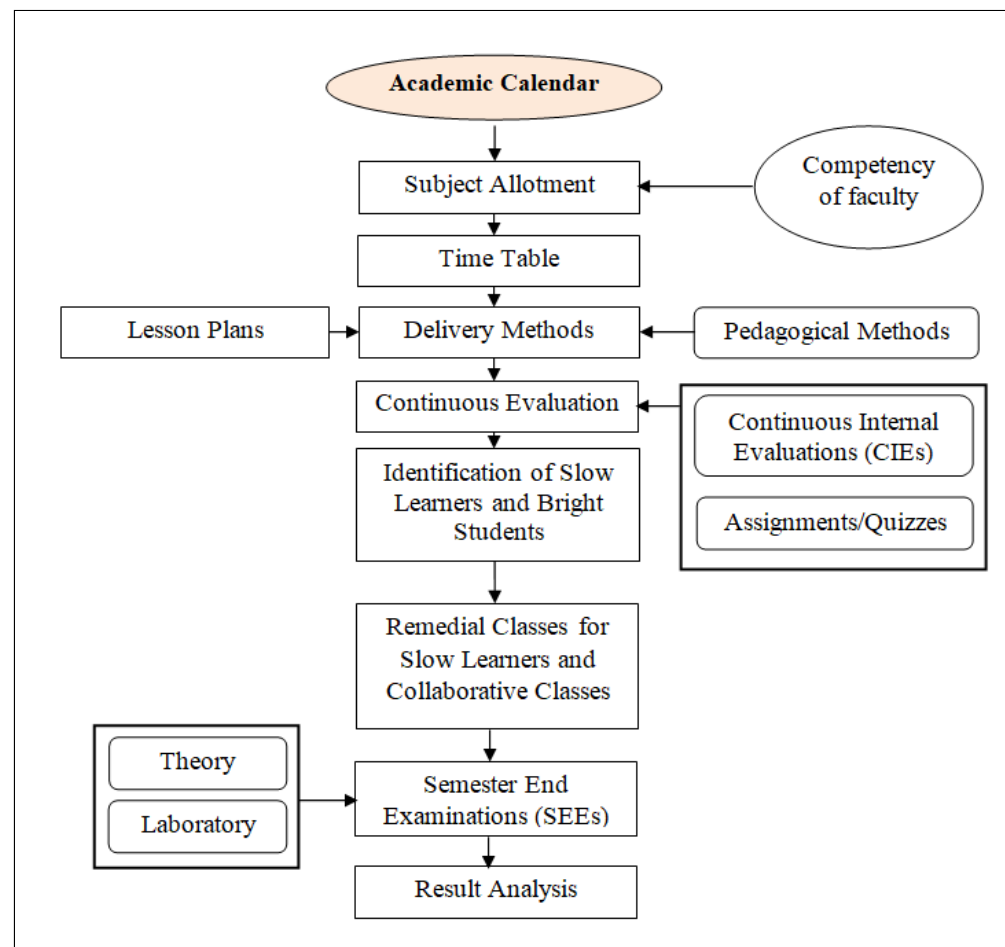


Figure 2.3. Teaching Learning Process

The processes followed to improve the quality of Teaching and Learning is as below:

**A. Adherence to Academic Calendar**

Department follows the academic calendar provided by the institute. It consists of the activities planned for the semester which includes internal test dates, laboratory and semester end examination schedules, etc. The sample copies of the institute academic calendar for the academic years are as shown in Figure 2.4

B.V.V.S. BASAVESHWAR ENGINEERING COLLEGE (AUTONOMOUS), BAGALKOT		B.V.V.S. BASAVESHWAR ENGINEERING COLLEGE (AUTONOMOUS), BAGALKOT	
CALENDAR OF EVENTS ODD SEMESTER 2018-2019 B.E. I Semester		CALENDAR OF EVENTS Academic Year 2019-20 EVEN SEMESTER B.E. II Semester	
DATE	EVENT	DATE	EVENT
30.07.2018	Parents Meet	02.01.2020	Registration and induction programme upto 14.01.2020
31.07.2018	Freshers' Day	06.01.2020	Commencement of Classes
01.08.2018	to	08.02.2020	Display of percentage of attendance upto 07.02.2020
18.08.2018	to Induction Programme	09.02.2020	First CIE Test
27.09.2018	Display of Percentage of attendance upto 26.09.2018	10.02.2020	Display of First Test CIE marks
28.09.2018	to	11.02.2020	Last date for dropping of subjects (Without mentioning in the grade card)
30.09.2018	First Test for CIE	18.02.2020	Display of percentage of attendance upto 18.02.2020
01.10.2018	to	19.02.2020	Second CIE Test
06.10.2018	Display of First Test CIE marks	20.02.2020	Display of Second Test CIE marks
09.10.2018	Last date for dropping of subjects (Without mentioning in the grade card)	21.02.2020	Display of percentage of attendance upto 19.04.2020
14.11.2018	Display of Percentage of attendance Upto 13.11.2018	22.02.2020	Third CIE Test
15.11.2018	to	23.02.2020	Display of Third Test CIE marks
16.11.2018	Second Test for CIE	24.02.2020	Display of final percentage of attendance
17.11.2018	to	25.02.2020	Display of non eligible students list for SEE by Faculty
23.11.2018	Display of second Test CIE marks	26.02.2020	Last date for withdrawal of subjects (With mention in the grade card)
23.11.2018	Display of Non eligible Students List for SEE by Faculty	27.02.2020	Last Instructions Day
24.11.2018	Last date for Withdrawal of Subjects	27.02.2020	CIE Laboratory Test
24.11.2018	Display of Final percentage of attendance	28.02.2020	to
27.11.2018	Last Instructions Day	29.02.2020	SEE Theory Examinations
28.11.2018	to	30.02.2020	to
3.12.2018	Lab Test for CIE	01.03.2020	SEE Practical Examinations
06.12.2018	to	02.03.2020	to
20.12.2018	SEE Theory Examinations	03.03.2020	Announcement of Results
21.12.2018	to	04.03.2020	Registration and Commencement of classes for Even semester
28.12.2018	SEE Practical Examinations	05.03.2020	to
01.01.2019	Announcement of Results	06.03.2020	Registration for supplementary semester
02.01.2019	Registration and Commencement of classes for Even semester	07.03.2020	Commencement of classes for supplementary semester
Total number of Working Days - 66 Days		Total number of Working Days - 93	
Coordinator	Principal	Coordinator	Principal

Figure 2.4. Sample Copies of Academic Calendars

## B. Pedagogical Initiatives

The department has been using pedagogical initiatives to improve the quality of teaching and learning are as shown in Figure 2.5. The process for the same is as listed below:

1. Subject allotment is done well in advance for the staff members to prepare lesson plans, course plans, soft and/or hard copies of the lecture notes.
2. The following pedagogical initiatives are being adopted in the department – Guest Lectures/Invited Talks, Collaborative Learning is achieved through *Student Association or Club Activities, Assignments, Group Works in the Laboratory (Mini-Projects/Main Projects)*, Workshops, Tutorials/Remedial Classes, Alumni Talk, Soft Skill Training, Mentoring Sessions, and Industrial Visits.
3. Invited talks and seminars/webinars on the current trends are arranged regularly from the industry/academia persons.
4. Tutorial/Remedial classes are conducted to support the slow learners based on their academic performance.
5. Workshops are organized to help the students to understand concepts beyond the curriculum.
6. Mentoring sessions are conducted to provide guidance to students towards achieving professional fulfillment and assessment of his/her academic progress as well as personal growth. One-one discussions, interaction between professors and students have increased the confidence levels of the students.

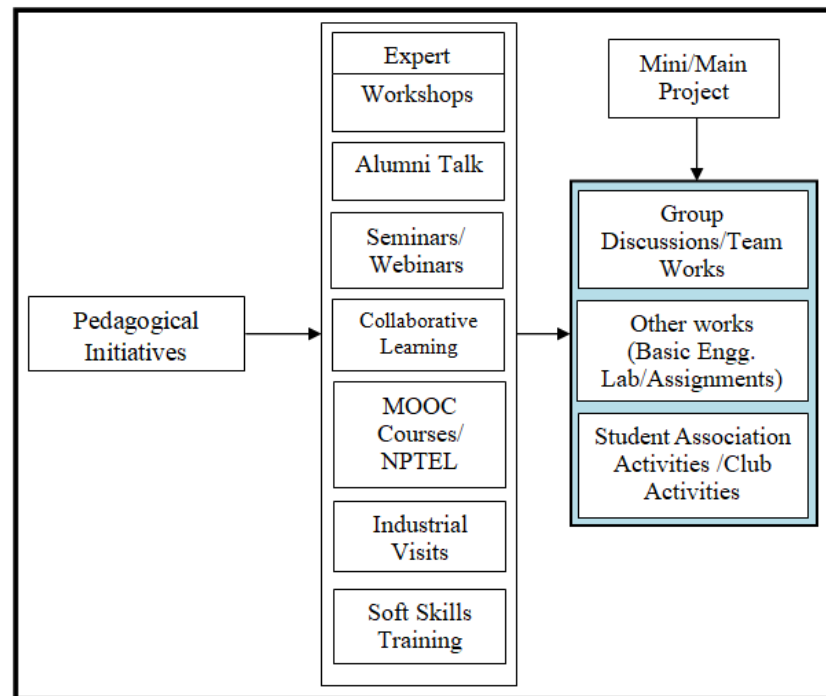


Figure 2.5. Pedagogical Initiatives for Teaching and Learning Process.

### C. Methodologies to support weak students and encourage bright students

#### Initiatives and implementation details of encouraging bright students

The bright students are identified based on their overall performance and their orientation towards academics. Institute always has a culture of encouraging bright students by providing them with the necessary guidance and moral support. The impact analysis for the same is as shown in table 2.2.

The department always encourages bright students to take up extra-curricular activities on various platforms attend more workshops and technical talks. The department has adopted the following activities for students every year.

- Awarding Gold Medal to the 1<sup>st</sup> rank holder.
- Awarding 5 ranks every year.
- Class Toppers are awarded every year.
- Financial assistance to attend conferences, workshops, competitions, etc.
- Encouraged to take up innovative projects and apply for funding.
- Students are motivated to attend more workshops and technical talks or events in-house or outside.
- Encouraged to take up the additional online courses like MOOCs/SWAYAM/NPTEL, etc.
- Encouraged to take up BE Honours or minor degree courses.
- Bright Students are encouraged to be members of professional bodies like IEEE, ISTE/CSI, etc.
- Encouraged to take up competitive exams like GATE, GRE, TOEFL, PGCE, UPSC and KPSC exams, and so on.
- Students are encouraged to participate in various student club activities.

#### Impact Analysis of Bright Students

- Improvement in Semester End Examination (SEE) results
- Improvement in programming skill, placement activities, paper writing skill, and higher studies,
- Improvement in communication and presentation skills
- Impact on taking online courses.

Table 2.2. Impact Analysis for Bright Student

Sl. No.	Measures	Academic Year			Remarks/Impact
		2018-19	2019-20	2020-21	
01	Placement Training:				
	a) Attended	74	82	82	--
	b) Placed	68	68	67	--
	- On Campus	29	32	56	Due to continuous efforts on campus is increased.
	- Off Campus	39	36	11	--
	c) Highest LPA	5	5	15	Improvement in LPA
	d) Average LPA	3	3	6	Improvement in LPA
02	BE Honors	---	---	01	It is introduced in the academic year 2019-20
03	Online Courses – NPTEL/SWAYAM	03	01	13	Because of awareness, increase the number of registration
04	Competitions:				
	a) Participated	07	09	68	Due to pandemic most of the competitions were online during the academic year 2020-21
	b) Prizes	03	03	00	Due to pandemic, the number of prizes reduced.
05	Student Development Porgrammes	08	08	09	Improvement in placements
	a) Number of Attended	67	74	76	Improvement in placements
06	Seminar/Webinars	64	72	74	Improvement in placements
07	Quizzes	02	02	08	Improvement in Knowledge
08	GATE/PGCET	09	03	00	Because of increase in industry requirments, students inclined towards placements.

#### Initiatives and implementation details of Assisting Weak Students

The department has a well-defined process of monitoring, guiding, and assisting slow learners (weak students). The following process is adopted every year.

- Care is taken by the faculty in monitoring the performance of slow learners, the students deviations from studies is observed by the respective mentors and corrective measures are taken.
- Every parent is informed about marks and the attendance of their respective candidate.
- Additional coaching is given to slow learners through remedial classes and study materials are provided to them.
- A special counselling and tutorial classes are conducted by the faculty for those students who have failed in any subject.
- Motivate the weak students to attend tutorials and help them solve more assignments/problem

#### Impact Analysis of Weak Students

- Improvement in Semester End Examinations – Remedial Classes
- Improvement in programming skills

- Develops positive attitude among students
- Improvement in placement, co-curricular/extra-curricular activities, participating in technical events, etc.

Impact Analysis of Remedial Classes (one of the measures take to assist weak students). The following table 2.3 shows the details of remedial classes and impact analysis for the same.

**Table 2.3. Details of remedial classes .**

S.N.	Academic Year	Name of Faculty Member	Subject with Subject Code	Department	Total Classes Engaged	Number of Students Registered	Remarks
1	2020-21	Prof. P. K. Deshpande	Data Structures and Algorithms UIS315C	Information Science and Engineering	17	37	Improvement found in CIE scores
2	2019-20	Prof. P. K. Deshpande	Data Structures and Algorithms UIS315C	Information Science and Engineering	20	35	
3	2018-19	Prof. P. K. Deshpande	Data Structures and Algorithms UIS315C	Information Science and Engineering	18	30	

#### D. Quality of classroom teaching

The quality of classroom teaching is an important factor to ensure quality learning by the students. To ensure quality of learning in the classroom following measures are used:

- Class rooms are equipped with smart boards, interactive boards which are used to deliver lecture effectively.
- Also, lecture-capture facilities are available in some of the classrooms. Thus captured videos are uploaded in the institute website for further reference by the students.
- The department has separate seminar hall with seating capacity of 100 which is equipped with modern presentation tools like audio, video, etc. The seminar hall is also equipped with air conditioners.
- Every classroom has good ambience in terms of lighting, seating, etc.

#### E. Conduction of experiments

- Before the commencement of every semester for the academic year, the required softwares are installed in every laboratory as per the curriculum.
- The faculty members instruct the students about the conduction of laboratory assignments. Also, the faculty members have prepared the laboratory manuals for their respective subjects.
- The manuals for every laboratory course are prepared and verified by the faculty members before the commencement of each semester.
- The manuals are kept in the laboratory for student reference.
- Sometimes, the students are asked to write the programmes for the problems which are not part but related to the regular assignments/programme listed during the examinations of CIE and SEE. Viva-voce is also conducted to the students in order to test their knowledge in the experiment or beyond.
- Every student maintains a book to record the details of work done in each laboratory session.

The following are the list of assignments:

#### F. Continuous Assessment in the Laboratory

- The laboratory assessment is performed on the basis of rubrics such as submission of laboratory records, participation in performing the experiments, analysis and interpretation of experiments, etc.
- The laboratory assignments/experiments are assessed continuously as following:
- **30 marks for conduction of all assignments/experiments:**
  - Each assignment/experiment is assessed immediately after completion by the students and marks are awarded based on the following rubrics:
    - **Write-up – 25%, Execution – 25%, Submission – 25%, Viva – 25%**
- **20 marks for Internal examinations:**
  - At the end of the semester, internal examination is conducted for every laboratory. The assessment and award of marks is based on rubrics as shown below table 2.4.

**Table 2.4. Rubrics for assessment and award of marks.**

Sl. No.	Parameters	Marks
---------	------------	-------

01	<b>Write-up:</b> <ul style="list-style-type: none"> <li>No writeup – 0%</li> <li>Moderate Analysis/Design/Code – 25%</li> <li>Good Design/Code – 50%</li> <li>Excellent Design/Code – 100%</li> </ul>	05
02	<b>Execution:</b> <ul style="list-style-type: none"> <li>Adhering to Coding standards (Proper indentation, use of comments, use of meaningful names to variable, functions, etc.) – 20%</li> <li>Error free Compilation – 50%</li> <li>Correct results – 100%</li> </ul>	10
03	<b>Viva-Voce</b> – Based on question answering	05

### G. Student Feedback on Teaching learning process and action taken

During the semester after one or two weeks an informal feedback is taken by head of department to know the problems being faced by students. If students are facing difficulty in any subject, the concerned faculty member is informed the same. Necessary guidance and support is given by HOD and another senior subject faculty member.

At the end of every semester feedback is collected through an online process system from the students. The suggestions are analyzed by the concerned HOD. Every question has a weightage up to 10 points. Based on the average points accrued for all the questions the faculty performance level is assessed. The performance of the teacher is graded as below table 2.5.

**Table 2.5. Feedback analysis**

More than 8 points	:	Excellent
From 6 to 8	:	Good
From 5 to 6	:	Average
Below 5	:	The teacher is subjected for any corrective measures as decided by Head of the Department

The teachers are rewarded with appreciation letters wherever they get a feedback of excellent and good.

The sample copy of feedback form and appreciation letter are shown below:



**BASAVESHWAR ENGINEERING COLLEGE(AUTONOMOUS), BAGALKOT**  
**STUDENT FEEDBACK REPORT**

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DEPARTMENT : INFORMATION SCIENCE & ENGINEERING  
 FACULTY NAME : PROF. P.V.KULKARNI  
 SUBJECT TITLE : INFORMATION SYSTEMS  
 SUBJECT CODE : UIS308C DIVISION : A SEMESTER : 3  
 ACADEMIC YEAR : 2016-17 SESSION : ODD NUMBER OF STUDENTS : 33 IS

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<b>A TIME SENSE/TIME MANAGEMENT</b>	<b>SCORE</b>
A-1 Regularity in taking the class	8.13
A-2 Arrives to class at scheduled time	8.02
A-3 Leaves the class at scheduled time	7.87
A-4 Completes the course within time	7.84
A-5 Follows the scheduled organization of c/e tests, assignments, quizzes and seminars/adherence to calendar	7.82
A-6 Makes alternate arrangement of class in his/her absence	7.51
<b>B SUBJECT COMMAND/KNOWLEDGE</b>	<b>SCORE</b>
B-1 Lecture planning	8.09
B-2 Come prepared for the class	8.09
B-3 Depth of knowledge about the subject	7.73
B-4 Knowledge about recent developments in subject area	7.91
B-5 Illustrations, live examples and problem solving	7.96
B-6 Skill of linking subject to life experience & creating interest in the subject	7.87
B-7 Standard books referred	8.20
<b>C COMMUNICATION SKILLS AND PERSONALITY</b>	<b>SCORE</b>
C-1 Fluency in spoken English	7.98
C-2 Availability	7.91
C-3 Body language	7.51
C-4 Eye contacts	7.33
C-5 Appearance (Neatness and cleanliness of dress)	8.04
C-6 Language used is easy and simple way to understand	7.33
<b>D USE OF TEACHING METHODS/ TEACHING AIDS</b>	<b>SCORE</b>
D-1 Black board usage	7.89
D-2 Blackboard/Whiteboard work in terms of legibility, visibility and structure	7.96
D-3 Drawing, figures, Graphs	7.71
D-4 Usage of teaching aids such as LCD, OHP etc.	7.76
D-5 Demonstration through models, prototypes, charts	7.27
D-6 Response to questions	8.02
D-7 Extraction of answers	7.64
D-8 Faculty makes sure that students are understanding the subject	8.04
D-9 Gives note whenever required	7.73
<b>E COUNSELING AND MENTORING</b>	<b>SCORE</b>
E-1 Approach towards developing professional skills among students	8.49
E-2 Availability and Listening to students problem during college hours (Friendliness)	8.04
E-3 Helping approach towards varied academic interests of students	7.87
E-4 Involves students for ethical conduct	7.85
E-5 Motivates students to study the subjects	8.71
E-6 Approachable and Interactive and taking individual care	7.42
E-7 Helps students in realizing career goals and developmental needs	7.58
<b>F EVALUATION QUALITY</b>	<b>SCORE</b>
F-1 Quality of C/E, Question paper setting	8.00
F-2 Fairness in Evaluation	8.07
F-3 Timely Evaluation and display of marks	8.46
F-4 Discussion of common mistakes and feed back for further improvements	7.96

**BASAVESHWAR ENGINEERING COLLEGE(AUTONOMOUS), BAGALKOT**  
**STUDENT FEEDBACK REPORT**

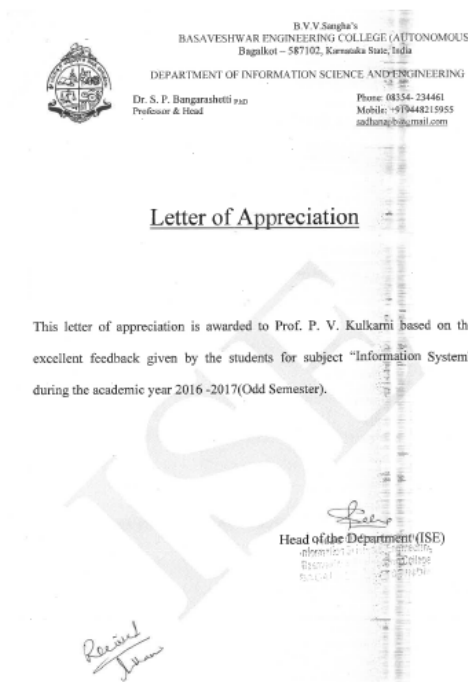
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DEPARTMENT : INFORMATION SCIENCE & ENGINEERING  
 FACULTY NAME : PROF. P.V.KULKARNI  
 SUBJECT TITLE : INFORMATION SYSTEMS  
 SUBJECT CODE : UIS308C DIVISION : A SEMESTER : 3  
 ACADEMIC YEAR : 2016-17 SESSION : ODD NUMBER OF STUDENTS : 33 IS

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<b>T OUTCOME</b>	<b>SCORE</b>
T-1 Learning outcome of the subject	7.93
T-2 Recommend him/her to teach the same subject for next year/Same faculty member for same subject	8.04
T-3 Overall performance of the faculty member	8.04

NOTE: This questionnaire has been designed by Basaveshwar Engineering College (Autonomous) Bagalkot to seek a feedback from the student to strengthen the quality of teaching-learning environment and to look for opportunities to improve teacher's performance in classroom engagement with students to bring excellence in teaching and learning.   
 -Extremely poor, 2- Very poor, 3- Poor, 4- Below expectations, 5-Average, 6- Just met your expectations, 7-Good, 8 -Very good, 9-10-Excellent)



#### H. Availability of learning beyond syllabus contents and promotion

- Provision of Internet in the hostels helps the students to learn beyond what is taught in the classroom.
- The biggest resource for self-learning is obviously the college library. The college library not only possesses plenty of books to meet the students' syllabus-oriented needs, but it also houses numerous books by eminent national and international authors on a variety of topics which students may regularly access to sharpen and broaden their knowledge.
- The library also possesses a number of journals (national/international), conference proceedings (national/international), magazines and periodicals related to different branches of science and technology which the students may readily access.
- Students are encouraged to visit NPTEL lectures, 'Coursera' courses, MOOCs courses, browse different internet sites to increase their knowledge base about the subject.
- Various SDPs/technical talks/guest lecture etc., are conducted to cater to needs of the students beyond the curriculum.

#### 2.2.2 Quality of end semester examination, internal semester question papers, assignments and evaluation (15)

Institute Marks : 15.00

##### A. Semester End Examination (SEE)

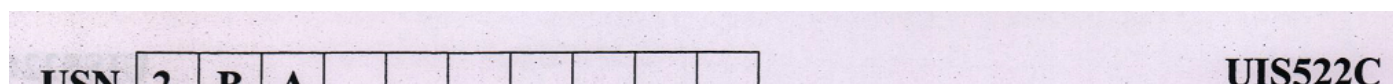
Quality of question paper is ensured by setting the questions keeping in mind the blooms learning levels, COs, and PIs. A uniform structure for the question paper has been adopted. The question paper contains a total of eight questions containing two questions from each unit of the syllabus. Student has to answer any five full questions choosing at least one question from each unit. This is done to make the student to prepare the entire syllabus to score better and also to ensure the attainment of all course outcomes defined.

Each question paper contains (not restricted to):

- 30% - 40% of questions in higher level of learning.
- 60% - 70% of questions in moderate level of learning.

A weightage for SEE is 50% and is conducted through one exam at the end of semester for 100 marks and reduced to 50 marks.

From the academic year 2021-22, the performance indicators are also mapped with questions. The sample copy of SEE QP is as shown below:



## B.E. Fifth Semester End Examinations, December 2019

### Software Engineering

Duration: 3 Hours

Max. Marks: 100

**NOTE:** Answer any **FIVE** full questions selecting at least **ONE** from each unit.

Q. No.	Question	Marks	BLL	CO
<b>UNIT - I</b>				
1. a)	What is a software service? Give an example of software service. Differentiate between a program and a software project.	8	3	1
b)	Explain classic waterfall model of software life cycle. What are the advantages and disadvantages?	8	1	2
c)	State the advantages of structural programming.	4	2	1
2. a)	Illustrate when prototype model of SDLC is preferred.	8	3	2
b)	Explain the activities that are taken during each of the four quadrants in spiral model of S/W development.	8	3	2
c)	Identify the definite stages through which a S/W product undergoes during life cycle.	4	2	2
<b>UNIT - II</b>				
3. a)	Define cohesion and coupling. List the different types of cohesion and coupling.	8	2	3
b)	Differentiate function oriented S/W design and object oriented S/W design.	4	3	3
c)	Tic-Tac-Toe is a computer game in which a human player and a computer make alternative moves on a 3×3 square. A move consists of marking previously unmarked square. The player who first places three consecutive marks along a straight line i.e along row, column, or diagonal wins the game. As soon as either human or computer wins, a message congratulating the winner should be displayed. If neither player wins and all the squares	8	4	3



should be displayed. If neither player wins and all the squares are filled up, then the game is drawn. Computer always tries to win. Drawn context level (level 0) and level 1 DFD for this problem description.

- |    |    |  |   |   |   |
|----|----|--|---|---|---|
| 4. | a) | Identify the use cases and actors in the registration process of BEC and write the use case diagram. | 8 | 4 | 3 |
|    | b) | Write the activity diagram for the admission process of BEC.   | 8 | 4 | 4 |
|    | c) | List the characteristics of good user interface.   | 4 | 2 | 4 |

### UNIT – III

- |    |    |                                 |    |   |   |
|----|----|---------------------------------|----|---|---|
| 5. | a) | Define the following:           | 10 | 2 | 4 |
|    |    | i. Statement testing.           |    |   |   |
|    |    | ii. Branch testing.             |    |   |   |
|    |    | iii. Condition testing.         |    |   |   |
|    |    | iv) Multiple condition testing. |    |   |   |
|    |    | v) Path testing.                |    |   |   |

1

### UIS522C

- |    |   |    |   |   |
|----|---|----|---|---|
| b) | A function accepts the marks scored in a subject in integer and return the grades as per BEC autonomous grading system. (Letter grade F,E,D,C,B,A and S based on marks scored). Using equivalence partitioning and boundary value analysis methods derive the test cases to test this function. | 10 | 5 | 4 |
|----|---|----|---|---|
- 
- |    |    |   |    |   |   |
|----|----|---|----|---|---|
| 6. | a) | For the program bellow find cyclomatic number | 10 | 5 | 4 |
|----|----|---|----|---|---|
- ```

int bin_search(int num)
{
    int min, max;
    min=0;
    max=100;
    While(min!=max)
    {
        if (array[(min+max)/2]>num)
            max=[min+max]/2;
        else
    
```



```

        if (array[min+max]/2)<num
            min=[min+max]/2
        else
            return(min+max);
        }
    }
    return(-1);
}

```

Find the paths and hence derive test cases to test all path.

- b) Define the following software reliability metrics. ROCOF, 10 2 4  
MTTF, MTTR, MTBR, POFOF, Availability.

#### UNIT - IV

7. a) What are the disadvantages of considering only LOC for 4 2 5  
estimating the project cost?
- b) Write the formula for effort and development time in Basic 10 4 5  
COCOMO model. Assume that the size of an organic type of  
S/W product has been estimated to be 32,000 line of source  
code. Assume average salary of S/W engineer is Rs.  
15,000/month. Determine the effort required to develop the S/W  
product and the normal development time using basic COCOMO  
model.
- c) Write note Putnam's study on project staffing. 6 1 5
8. a) Write short notes on: 20 2 5  
i. GANT chart  
ii. PERT chart  
iii. TEAM structures  
iv. Characteristics of good S/W engineer.

A photograph of a piece of paper with the number 2 written on it. The paper is slightly aged and has some minor stains. The number 2 is written in a dark, possibly black, ink or marker.**B. Continuous Internal Evaluation (CIE)**

Internal evaluation is on continuous bases (Continuous Internal Evaluation (CIE)) by conducting three CIE tests each for 15 marks.

- Internal evaluation (CIE) question papers are prepared considering the standards of OBE and COs, and PIs.
- Internal Question Paper Scrutiny Committee (IQPSC) is constituted which scrutinizes the question paper set by faculty.

The sample copy of SEE QP is as shown below:



**BASAVESHWAR ENGINEERING COLLEGE (AUTONOMOUS)**  
**BAGALKOT**  
**DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING**

**CIE TEST-II – (EVEN SEMESTER 2020-21)**

|                     |                        |                  |                  |
|---------------------|------------------------|------------------|------------------|
| <b>Course</b>       | <b>B.E</b>             | <b>Semester</b>  | <b>4</b>         |
| <b>Subject</b>      | <b>TFCS(UIS406C)</b>   | <b>Division</b>  | <b>A &amp; B</b> |
| <b>Date</b>         | <b>06-07-2021</b>      | <b>Time</b>      | <b>3-4 PM</b>    |
| <b>Faculty Name</b> | <b>Dr. S. R. Patil</b> | <b>Max.Marks</b> | <b>30</b>        |

**Answer any TWO full Questions**

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | MARKS    | BLL | CO |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----|----|-----------------|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q1.a.           | State and prove pumping lemma for regular languages.                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 07       | 2   | 2  |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |     |    |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| b.              | Show that $L = a^n1$ is not regular                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 08       | 3   | 2  |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |     |    |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |     |    |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Q2.a.           | Find the minimized DFA for the following using table filling algorithm.<br><table><tr><td><math>\delta</math></td><td>0</td><td>1</td></tr><tr><td><math>\rightarrow A</math></td><td>B</td><td>A</td></tr><tr><td>B</td><td>A</td><td>C</td></tr><tr><td>C</td><td>D</td><td>B</td></tr><tr><td>*D</td><td>D</td><td>A</td></tr><tr><td>E</td><td>D</td><td>F</td></tr><tr><td>F</td><td>G</td><td>E</td></tr><tr><td>G</td><td>F</td><td>G</td></tr><tr><td>H</td><td>G</td><td>D</td></tr></table> | $\delta$ | 0   | 1  | $\rightarrow A$ | B | A | B | A | C | C | D | B | *D | D | A | E | D | F | F | G | E | G | F | G | H | G | D | 9 | 3 | 2 |
| $\delta$        | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1        |     |    |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| $\rightarrow A$ | B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | A        |     |    |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| B               | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | C        |     |    |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| C               | D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | B        |     |    |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| *D              | D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | A        |     |    |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| E               | D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | F        |     |    |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| F               | G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | E        |     |    |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| G               | F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | G        |     |    |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| H               | G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | D        |     |    |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |     |    |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| b.              | Show that the regular language is closure under reversal                                                                                                                                                                                                                                                                                                                                                                                                                                              | 06       | 3   | 2  |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |     |    |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |     |    |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Q3.a.           | Obtain a grammar to generate integers                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 07       | 3   | 3  |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |     |    |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| b.              | Is the following grammar ambiguous?<br>$S \rightarrow aB/bA$<br>$A \rightarrow aS/bAA/a$<br>$B \rightarrow bS/aBB/b$                                                                                                                                                                                                                                                                                                                                                                                  | 08       | 3   | 3  |                 |   |   |   |   |   |   |   |   |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

### C. Assignments

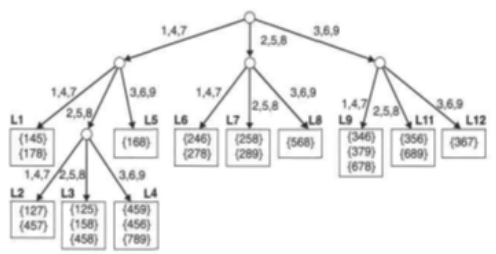
Assignment problems and submission dates are given by the respective faculty members in each subject. All assignments are framed and mapped with COs and Bloom's taxonomy. The weightage given to assignments is 5% and for the evaluation of the same, various methods such as MCQs, Quizzes, Seminars, etc have been employed.

The sample copy of assignment is as shown below:

## DATA MINING (UIS061E)

## Assignment 2.

Each assignment carries 5marks. Submit the assignments in an A4 size paper (typed), using 12 pt. font size, and Times New Roman font style. The assignments will be evaluated as per the rubrics of assignment 1.

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |         |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 1. | Define the following:<br>a. Support of an item set.<br>b. Support of an association rule.<br>c. Confidence of an association rule.<br>d. Apriory principle.<br>e. Frequent itemset.<br>f. Closed Frequent itemset.<br>g. Maximal Frequent itemset.                                                                                                                                                                                                                                          | L1, CO3 |
| 2. | Prove that all nonempty subsets of a frequent itemset must also be frequent.                                                                                                                                                                                                                                                                                                                                                                                                                | L3, CO3 |
| 3. | The Apriory algorithm uses a hash tree data structure to efficiently count the support of candidate itemsets. Consider the hash tree for candidate 3-itemsets shown in Figure.<br><br><br>a. Enumerate all the candidate 3-itemsets from the transaction {1,2,3,6,7,8,9}<br>b. Which of the hash tree leaf nodes will be visited when finding the candidates of the transaction for the above transaction? | L3, CO3 |
| 4. | Consider the following market basket transaction table. Find all the frequent item sets and then the association rules. Assume 30% support and 60% confidence. Use<br>a. Apriory principle. Use $F_{k-1} \times F_{k-1}$ method to generate candidate itemsets.<br>b. FP tree and use it to find frequent itemsets.<br>c. ECLAT                                                                                                                                                             | L4, CO3 |

Market Basket transaction Table

| Tid | Items in transaction |
|-----|----------------------|
| 1.  | {a, b, d, e}         |
| 2   | {b, c, d}            |
| 3   | {a, b, d, e}         |
| 4   | {a, c, d, e}         |
| 5   | {b, c, d, e}         |
| 6   | {b, d, e}            |
| 7   | {c, d}               |
| 8   | {a, b, c}            |
| 9   | {a, d, e}            |
| 10  | {b, d}               |

|    |                                                                                                                                                                                                                                                                                                                  |         |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 5. | Write a function which will take an association rule ( $X \rightarrow Y$ ) as input and returns the confidence of the rule. Define a data structure to store the support of frequent itemsets and assume your own supports.<br><br><pre>float find_confidence (string X, string Y) {     -----     ----- }</pre> | L5, CO3 |
| 6. | Draw the itemset lattice for the above dataset in Q.No5. Find all frequent, closed frequent and maximal frequent itemsets using the lattice.                                                                                                                                                                     | L4, CO3 |
| 7. | Illustrate using an example the limitations of using confidence measure to find the goodness of an association rule.                                                                                                                                                                                             | L4, CO3 |

Date announced: 24.02.2018  
Date of Submission: 07.03.2018

P V Kulkarni.

## D. The complete evaluation process of SEE and CIE examinations

The complete evaluation process is as shown in below table:

Table 2.6. Evaluation Process for Examinations

| Sl. No. | Examination | Particular  | % of marks |
|---------|-------------|-------------|------------|
| 1       | Theory      | CIE-1       | 15         |
|         |             | CIE-2       | 15         |
|         |             | CIE-3       | 15         |
|         |             | Assignments | 05         |



|   |                                 |     |                             |
|---|---------------------------------|-----|-----------------------------|
|   |                                 | SEE | 50                          |
| 2 | Practical                       | CIE | 30 - Laboratory Experiments |
|   |                                 |     | 20 – Internal Examinations  |
|   |                                 | SEE | 50                          |
| 3 | Project Phase-1                 | CIE | 50                          |
|   |                                 | SEE | 50                          |
| 4 | Project Phase-2                 | CIE | 50                          |
|   |                                 | SEE | 50                          |
| 5 | Seminar/Internship/Mini Project | CIE | 50                          |
|   |                                 | SEE | 50                          |

### 2.2.3 Quality of student projects (20)

Institute Marks : 20.00

- The project coordinator advises the students to form a group of 2 to 4 members and identify the project area / title, obtain the consent of faculty/industry professionals to guide them.
- The Project coordinator collects these details from the students at the beginning of seventh semester.
- The Head of Department/ project coordinator finalize project titles, project guide, and group of students and display the allocation within one week.
- Students are encouraged to carry out in house projects and support will be provided with all necessary software and hardware.
- The Head of Department / project coordinator allocates laboratory resources for in-house projects. Also, allocates the number of days per week for working on the projects in the industry, if the project is being carried out in industry.
- Students are encouraged to participate in project exhibitions. The project exhibition was aimed to provide common platform to exhibit their innovations and their work towards excellence in latest technology.
- The faculties encourage students to avail the external funding schemes for their project work. (Like KSCST, VTU project funding scheme, TEQIP, and KBITS).

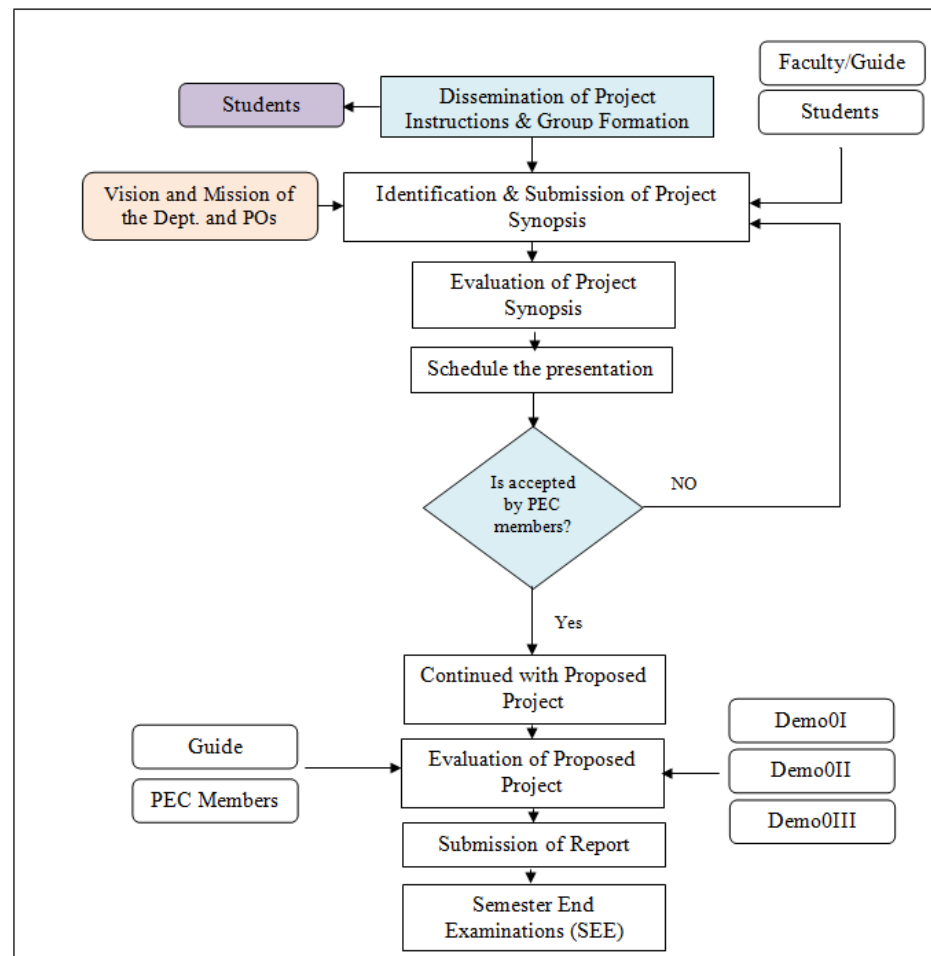


Figure 2.6. The Process of Project identification, allotment, monitoring and evaluation

The process of project identification, allotment, monitoring and evaluation is as shown in Figure 2.6. The descriptions for the same is described below.

#### A. Identification of projects and allocation methodology to faculty

##### A.1. Project Identification:

- The student's projects are selected in line with department mission, vision and program outcomes.
- Department encourages to identify interdisciplinary projects.
- The projects are identified to relevant contexts in terms of application, product, research, review, etc.
- Also, students are provided with brief idea of various new fields for selecting the project ideas from various domains and technologies like Cloud computing, Internet of Things, Image Processing, Patterns recognition, etc.

##### A.2. Project Allotment:

- Faculty are allocated as guides to guide the student's project based on their area of expertise and Interest.
- Sometimes, students are also given choice to choose their guide that matches their project domain.

#### B. Types and Relevance of the projects and contributions towards attainment of POs and PSOs

The following tables show the types and relevance of the projects for the academic years 2018-19, 2019-20, and 2020-21.

**Table 2.7. The Projects Relevance with POs and PSOs – AY 2018-19**

| Sl. No. | Project Title                                             | Project Mates        | Guide                   | POs Contributed              | PSOs Contributed                         | Type of Project                          |             |
|---------|-----------------------------------------------------------|----------------------|-------------------------|------------------------------|------------------------------------------|------------------------------------------|-------------|
| 1       | Big Data Analytics of energy data of BEC Campus           | Abhishek Viraktimath | Dr. S. R. Patil         | IS-PO2,                      | IS-PSO1,<br><br>IS-PSO2,<br>&<br>IS-PSO3 | Research                                 |             |
|         |                                                           | Prakash Tadasad      |                         |                              |                                          |                                          |             |
|         |                                                           | Shivakumar Shidenur  |                         |                              |                                          |                                          |             |
|         |                                                           | Yeshwant Markod      |                         |                              |                                          |                                          |             |
| 2       | Android based water level detection for an over head tank | Jyoti Ambi           | Dr. S. P. Bangarashetti | IS-PO3,                      |                                          | IS-PSO1,<br><br>IS-PSO2,<br>&<br>IS-PSO3 | Application |
|         |                                                           | Parvati Balumath     |                         | IS-PO4,                      |                                          |                                          |             |
|         |                                                           | Lakshmi Kakkalameli  |                         |                              |                                          |                                          |             |
|         |                                                           | Soumya P. Munavalli  |                         |                              |                                          |                                          |             |
| 3       | IoT Based Health Monitoring System                        | Arun Marol           | Prof. P. K. Deshpande   | IS-PO5,                      | IS-PSO1,<br><br>IS-PSO2,<br>&<br>IS-PSO3 |                                          | Application |
|         |                                                           | Gollalesh M B        |                         | IS-PO11,<br><br>&<br>IS-PO2, |                                          |                                          |             |
|         |                                                           | Sunilkumar           |                         |                              |                                          |                                          |             |
|         |                                                           | Shravya Shastri      |                         |                              |                                          |                                          |             |
| 4       | LPG Gas Leakage Detection using IoT                       | Pragathi S. P.       | Prof. Deepa I. K.       |                              |                                          | IS-PSO1,<br><br>IS-PSO2,<br>&<br>IS-PSO3 | Application |
|         |                                                           | Pavitra              |                         |                              |                                          |                                          |             |
|         |                                                           | Nishat Anjum         |                         |                              |                                          |                                          |             |
|         |                                                           | Aishwarya            |                         |                              |                                          |                                          |             |

**Table 2.8. The Project Relevance with POs and PSOs – AY 2019-20**

| Sl. No. | Project Title                                                                   | Project Mates             | Guide                  | POs Contributed | PSOs Contributed | Type of Project |
|---------|---------------------------------------------------------------------------------|---------------------------|------------------------|-----------------|------------------|-----------------|
| 1       | Streetlight Automation and Underground cable fault detection monitoring System. | Aishwarya Joshi           | Prof. S. N. Kugali     | IS-PO2,         | IS-PSO1,         | Research        |
|         |                                                                                 | Nikhita Vithal Latni      |                        |                 |                  |                 |
|         |                                                                                 | Sahana Ashok Patil        |                        | IS-PO3,         | IS-PSO2,         |                 |
|         |                                                                                 | Tejashwini G Gangangoudar |                        |                 | &                |                 |
| 2       | Smart Agriculture Monitoring System                                             | Shridhar K                | Dr. S. R. Patil        | IS-PO4,         | IS-PSO3          | Application     |
|         |                                                                                 | Akshay Malaghan           |                        |                 |                  |                 |
|         |                                                                                 | M. B. Bhovivaddar         |                        | IS-PO5,         |                  |                 |
|         |                                                                                 | Manthan Betageri          |                        | IS-PO11,        |                  |                 |
| 3       | Greenhouse Monitoring and Control System using IOT                              | Chaitra Nagraj D.         | Dr. S. P. Bangarshetti | IS-PO2,         |                  | Application     |
|         |                                                                                 | Komal P. Badnikai         |                        |                 |                  |                 |
|         |                                                                                 |                           |                        |                 |                  |                 |

|   |                                                           |                        |                  |  |  |             |
|---|-----------------------------------------------------------|------------------------|------------------|--|--|-------------|
| 4 | Visual Product Identification for Blind using Android App | Pooja Chavan           | Dr. B. M. Reshmi |  |  | Application |
|   |                                                           | Shruti Bhanvi          |                  |  |  |             |
|   |                                                           | Ashwini Patil          |                  |  |  |             |
|   |                                                           | Chandrashekar N. Patil |                  |  |  |             |
|   |                                                           | Manisha Ramesh Handi   |                  |  |  |             |
|   |                                                           | Prafulkumar C. Shettar |                  |  |  |             |

Table 2.9. The Project Relevance with POs and PSOs - AY 2020-21

| Sl. No. | Project Title                                    | Project Mates     | Guide                 | POs Contributed | PSOs Contributed   | Type of Project |
|---------|--------------------------------------------------|-------------------|-----------------------|-----------------|--------------------|-----------------|
| 1       | Smart Home Automation System                     | Sushma K.         | Prof. R. B. Math      | IS-PO2,         |                    | Application     |
|         |                                                  | Aishwarya C.      |                       |                 |                    |                 |
|         |                                                  | Basavanneva D.    |                       |                 |                    |                 |
|         |                                                  | Deepa S.          |                       |                 |                    |                 |
| 2       | Insurance Fraud Detection using machine Learning | Aishwarya A.      | Prof. C. R. Shivanagi | IS-PO3,         | IS-PSO1,           | Research        |
|         |                                                  | Jotshna K.        |                       | IS-PO4,         |                    |                 |
|         |                                                  | Laxmee M.         |                       |                 |                    |                 |
| 3       | Smart Bottle Monitoring System                   | Pratima D.        | Dr. A. D. Devanagavi  | IS-PO5,         | IS-PSO2, & IS-PSO3 | Application     |
|         |                                                  | Anusha A. K.      |                       |                 |                    |                 |
|         |                                                  | Poornima B.       |                       |                 |                    |                 |
|         |                                                  | Prafulla M. H.    |                       | IS-PO11,        |                    |                 |
| 4       | Li-Fi(Light Fidelity) text communication system  | Rakesh p. N.      | Dr. L. B. Bhajantri   | IS-PO2,         |                    | Research        |
|         |                                                  | Shrihari K.       |                       |                 |                    |                 |
|         |                                                  | Vijayakumar S. H. |                       |                 |                    |                 |
|         |                                                  | Yamanoor M.       |                       |                 |                    |                 |

### C. Process for Continuous Monitoring and Evaluation

- Every academic year, a faculty is nominated as a project coordinator who is responsible for planning, scheduling, and execution of all the activities related to the student's project work.
- The Project Evaluation Committee (PEC) is constituted comprising of HoD, senior faculty, and project coordinator. This is responsible for monitoring of students project progress through three demonstrations based on the rubrics.
- Project students should meet their respective guide weekly once or twice and asked to explain their progress they have done in their project.
- Project guide will assess each student in team and make them work in right way
- They should submit project progress report weekly once and to get approved by the respective guide.
- The faculty and students must update the project diary on every interactions were carried out.

#### Project Evaluation:

- Project works are evaluated by the Project Evaluation committee (PEC) as per the schedule.
- The PEC members evaluate and assess the performance of project teams periodically by three demonstrations in the semester, as per the rubrics.
- Students appear before the committee with power point presentation and followed by actual demonstration work done and Viva-Voce.
- The best projects are selected, scrutinized by the PEC members and recommended for exhibitions and competitions.
- Each project is evaluated with internal marks and are graded according to their project quality and with their contribution towards attainment of PO's

The evaluation of project phase-I and Phase-II are described below:

### 1. Project Work Phase – I

#### 1. CIE – 50 Marks

Marks awarded by Project Internal Evaluation Committee (PIEC) based on the progress of the project evaluated periodically by three demonstrations. Marks of the demonstrations are cumulated and split as Demo 1: for 15 marks, Demo 2: for 15 marks, Demo 3: for 20 marks. Final marks will be sent to the examination section by the project coordinator. The marks are allotted based on the rubrics developed for each of the demos.

#### 2. SEE – 50 Marks

Departmental Committee (DC) will conduct the examination which consists of Two Senior Staff and Guide (HOD/Nominee, Guide, and Project Coordinator). The allocation of marks is done based on the rubrics.

### 2. Project Work Phase – II

#### 1. CIE – 50 Marks

Marks awarded by DC based on the progress of the project evaluated periodically as explained for project phase – I.

#### 2. SEE – 50 Marks

The Project Evaluation Committee (PEC) will conduct the examination which consists of one internal Examiner, one external examiner, and HoD/HoD nominee. External examiner is appointed by COE from outside the college.

### D. Process to assess individual and team performance

Each student has to carry out two projects, miniproject in semester 6 and main project in two phases (Phase-I in 7<sup>th</sup> semester and phase-II in 8<sup>th</sup> semester). The individual and team performance is assessed in regular intervals and marks are awarded as per the rubrics mentioned below:

#### R1: Rubrics to evaluate mini-project in the beginning of semester: Within ONE MONTH from the start of 6<sup>th</sup> semester BE

| Evaluation Criteria                                                                                                                       | Needs improvements (Poor)<br>(2)                                                                                                                  | Acceptable (Average)<br>(3)                                                                                                         | Satisfactory (Good)<br>(4)                                                                                | Proficient (Very good)<br>(5)                                                                                              | Total marks | Evaluated by                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Articulate problem statements and identify objectives<br>- GA                                                                             | • Problem statement and objectives are not clear                                                                                                  | • Problem statement is clear and objectives are not in line with problem statement                                                  | • Problem statement is clear and objectives are not completely defined.                                   | • Problem statement is clear and objectives are completely defined                                                         | 15          | Committee consisting of (s),<br>HoD, Mini-project coordinator and guide<br><br>Each will evaluate for 15 marks and average of all the three is the marks awarded |
| Identify existing processes/ solution methods for solving the problem, including forming justified approximations and assumptions<br>- GA | • Not able to identify existing solution for solving the problem. The assumptions, approximations and justifications are identified but not clear | • Not able to identify existing solution for solving the problem. But assumptions and approximations are aligned to the objectives. | • Able to identify existing solution for solving the problem. Assumptions, and approximations are clear   | • Able to identify existing solution for solving the problem. and assumptions, approximations and justifications are clear |             |                                                                                                                                                                  |
| Compare and contrast alternative solution processes to select the best process-<br>GA                                                     | • Not able to compare alternative solution processes                                                                                              | • Able to compare alternative solution processes but could not contrast clearly                                                     | • Able to compare alternative solution processes and contrast clearly but not able to select best process | • Able to compare alternative solution processes, contrast it and also able to select best process                         |             |                                                                                                                                                                  |

GA – Group Assessment

IA – Individual Assessment

**R2: Rubrics to review mini-project: Before 15 days from the end of 6th semester of B.E.**

| Evaluation Criteria                                                                                                                                                  | Needs improvements (Poor)<br>(2)                                                                                                                                      | Acceptable (Average)<br>(3)                                                                                                                                                                | Satisfactory (Good)<br>(4)                                                                                                                                                   | Proficient (Very good)<br>(5)                                                                                                                                       | Total marks | Evaluated by                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Apply formal idea generation tools to develop multiple engineering design solutions and Identify suitable criteria for evaluation of alternate design solutions - GA | <ul style="list-style-type: none"> <li>• Able to identify but not able to use it effectively</li> <li>• Able to identify criteria but not able to use them</li> </ul> | <ul style="list-style-type: none"> <li>• Able to use the tool but not able to generate engineering designs</li> <li>• Able to use criteria but not able to compare alternatives</li> </ul> | <ul style="list-style-type: none"> <li>• Able to generate engineering designs but not able to justify</li> <li>• Not able to justify the comparison with criteria</li> </ul> | <ul style="list-style-type: none"> <li>• Able to generate engineering designs with justification</li> <li>• Able to justify the comparison with criteria</li> </ul> | 15          | Committee consisting of (s), HoD, Mini-project coordinator and guide<br><br>Each will evaluate for 15 marks and average of all the three is the marks awarded |
| Apply formal decision-making tools to select optimal engineering design solutions for further development - GA                                                       | <ul style="list-style-type: none"> <li>• Able to identify but not able to choose optimum one</li> </ul>                                                               | <ul style="list-style-type: none"> <li>• Able to identify optimum one but not able to use it</li> </ul>                                                                                    | <ul style="list-style-type: none"> <li>• Able to use optimum one but not able to justify</li> </ul>                                                                          | <ul style="list-style-type: none"> <li>• Able to use optimum one with justification</li> </ul>                                                                      |             |                                                                                                                                                               |
| Build models/ prototypes to develop diverse set of design solutions and develop drawings - IA                                                                        | <ul style="list-style-type: none"> <li>• Able to choose the tool but not able to use it effectively</li> </ul>                                                        | <ul style="list-style-type: none"> <li>• Able to use the tool but not able to generate alternatives</li> </ul>                                                                             | <ul style="list-style-type: none"> <li>• Able to generate alternatives but not able to justify the best solution</li> </ul>                                                  | <ul style="list-style-type: none"> <li>• Able to generate and justify the best solution</li> </ul>                                                                  |             |                                                                                                                                                               |

GA – Group Assessment

IA – Individual Assessment

**R3: Rubrics for evaluation by the guide(s): Before one week from the end of 6th semester of B.E.**

| Evaluation Criteria                                                                | Score/Marks                                                                                                                                                           |                                                                                                                                                    |                                                                                                                                                               |                                                                                                                                                                | Total Marks | Evaluated by |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|
|                                                                                    | Needs improvement (Poor)<br>(2)                                                                                                                                       | Acceptable (Average)<br>(3)                                                                                                                        | Satisfactory (Good)<br>(4)                                                                                                                                    | Proficient (Excellent)<br>(5)                                                                                                                                  |             |              |
| Identify engineering systems, variables, and parameters to solve the problems - IA | <ul style="list-style-type: none"> <li>• Engineering systems are identified but not clear. Variables, and parameters to solve the problems are not defined</li> </ul> | <ul style="list-style-type: none"> <li>• Engineering systems are clear. Variables, and parameters to solve the problems are not defined</li> </ul> | <ul style="list-style-type: none"> <li>• Engineering systems are identified. Variables, and parameters to solve the problems are partially defined</li> </ul> | <ul style="list-style-type: none"> <li>• Engineering systems are identified. Variables, and parameters to solve the problems are completely defined</li> </ul> | 20          | Guide(s)     |
| Technical Knowledge and Awareness related to the Project - IA                      | <ul style="list-style-type: none"> <li>• Poor knowledge and no awareness related to project</li> </ul>                                                                | <ul style="list-style-type: none"> <li>• Lacks sufficient knowledge and Awareness</li> </ul>                                                       | <ul style="list-style-type: none"> <li>• Fair knowledge and awareness related to the project</li> </ul>                                                       | <ul style="list-style-type: none"> <li>• Extensive knowledge and awareness related to the project</li> </ul>                                                   |             |              |
| Regularity and Attendance - IA                                                     | <ul style="list-style-type: none"> <li>• Irregular and inconsistent in work</li> </ul>                                                                                | <ul style="list-style-type: none"> <li>• Reports to the guide but lacks consistency</li> </ul>                                                     | <ul style="list-style-type: none"> <li>• Reports to the guide very often but not very consistent</li> </ul>                                                   | <ul style="list-style-type: none"> <li>• Reports to the guide regularly and consistent in work</li> </ul>                                                      |             |              |
| Read, understand and interpret technical and non-technical information - GA        | <ul style="list-style-type: none"> <li>• Able to identify non-technical information</li> </ul>                                                                        | <ul style="list-style-type: none"> <li>• Able to read technical and non-technical information, but could not understand and interpret</li> </ul>   | <ul style="list-style-type: none"> <li>• Able to read, understand technical and non-technical information, but could not interpret</li> </ul>                 | <ul style="list-style-type: none"> <li>• Able to read, understand and interpret technical and non-technical information</li> </ul>                             |             |              |

**R4: Rubrics for SEE evaluation**

| Evaluation Criteria                                                                                       | Very poor (2)                                           | Poor (4)                                                                       | Average (6)                                                                 | Good (8)                                                                                | Very good (10)                                                                                      | Total marks | Evaluated by                  |
|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-------------|-------------------------------|
| Generate information through appropriate tests to improve or revise design - GA                           | • Not able to identify suitable tests to be done        | • Able to identify but not able to follow testing procedure                    | • Able to follow testing procedures but not able to collect information     | • Able to collect information but not able to apply it for improvement                  | • Able to apply information for the improvement                                                     | 50          | External + Internal Examiners |
| Use appropriate procedures, tools and techniques to conduct experiments and collect data - GA             | • Not able to identify tools, techniques and procedures | • Able to identify but not able to conduct experiments                         | • Able to conduct experiments but not able to follow procedure              | • Able to follow procedure but not able to collect data                                 | • Able to collect data as per the standards                                                         |             |                               |
| Analyze data for trends and correlations, stating possible errors and limitations - GA                    | • Not able to understand data                           | • Able to understand but not able to analyze data                              | • Able to analyze data but not able to correlate them                       | • Able to correlate but not able to identify errors and limitations                     | • Able to identify errors and limitations                                                           |             |                               |
| Deliver effective oral presentations to technical and non-technical audiences - IA                        | • Could not deliver effective presentations.            | • Could not deliver presentation, but presentation was prepared and attempted. | • Able to deliver fair presentation but not able to answer to the audiences | • Deliver effective presentations but able to answer partially to the audience queries. | • Deliver effective presentation and able to answer all queries of the audience.                    |             |                               |
| Present results as a team, with smooth integration of contributions from all individual efforts - GA + IA | • No Contribution from an individual to a team          | • Contributions from an individual to a team is minimal                        | • Contributions from an individual to a team is moderate                    | • A contribution from an individual to a team is good but not well groomed in team.     | • Contribution from an individual to a team is good and results in an integrated team presentation. |             |                               |

GA – Group Assessment    IA – Individual Assessment

**Rubrics for Major Project Phase-I and II (VII+VIII semester)**

## SEMESTER VII

| Rubrics for | Phase                    | Period (Duration)                                                                  | Rubric # | Marks | Evaluation by                                                                 |
|-------------|--------------------------|------------------------------------------------------------------------------------|----------|-------|-------------------------------------------------------------------------------|
| CIE         | Evaluation-I             | Before one month from the start of 7 <sup>th</sup> semester of BE Program          | R1       | 15    | Committee consisting of HOD/Nominee + Project Coordinator + Guide(s)          |
|             | Evaluation-II            | Before 15 days from the last working day of 7 <sup>th</sup> semester of BE Program | R2       | 15    |                                                                               |
|             | Evaluation by guide      | In the last week of working days                                                   | R3       | 20    | Guide(s)                                                                      |
| SEE         | Semester End Examination | During SEE of 7 <sup>th</sup> semester of BE Program                               | R4       | 50    | Committee consisting of HOD/Nominee + Project Coordinator + External Examiner |

## SEMESTER VIII

| Rubrics for | Phase                    | Period (Duration)                                                                  | Rubric # | Marks | Evaluation by                                                                 |
|-------------|--------------------------|------------------------------------------------------------------------------------|----------|-------|-------------------------------------------------------------------------------|
| CIE         | Evaluation-I             | Before one month from the start of 8 <sup>th</sup> semester of BE Program          | R5       | 15    | Committee consisting of HOD/Nominee + Project Coordinator + Guide(s)          |
|             | Evaluation-II            | Before 15 days from the last working day of 8 <sup>th</sup> semester of BE Program | R6       | 15    |                                                                               |
|             | Evaluation by guide      |                                                                                    | R7       | 20    | Guide(s)                                                                      |
| SEE         | Semester End Examination | During SEE of 8 <sup>th</sup> semester of BE Program                               | R8       | 50    | Committee consisting of HOD/Nominee + Project Coordinator + External Examiner |



**R1. Synopsis presentation (Before one month from the start of 7th semester of BE): Total Marks of 15**

| Evaluation Criteria                             | Score/Marks                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                            | Total Marks | Evaluation By                                                                                                                                             |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                 | Poor<br>(Needs Improvement)<br>(1)                                                                                                                                                                                                                                                                  | Average<br>(Acceptable)<br>(3)                                                                                                                                                                                                                                                                                         | Very good<br>(Proficient)<br>(5)                                                                                                                                                                                                                                                           |             |                                                                                                                                                           |
| <b>Motivation And Rationale behind the work</b> | <ul style="list-style-type: none"> <li>Less motivated and has less desire to achieve a goal, accomplish a task, or work</li> <li>Need for the process /product which offers viable solutions to accomplish a work towards expectations in a challenging and interesting area is not good</li> </ul> | <ul style="list-style-type: none"> <li>Moderately motivated and has some interest to achieve a goal, accomplish a task, or work</li> <li>Need for the process /product which offers viable solutions to accomplish a work towards expectations in a challenging and interesting area is okay and acceptable</li> </ul> | <ul style="list-style-type: none"> <li>Highly motivated and desirous to achieve a goal, accomplish a task, or work</li> <li>Need for the process /product which offers viable solutions to accomplish a work towards expectations in a challenging and interesting area is good</li> </ul> | 15          | Committee consisting of HOD/Nominee + Project Coordinator + Guide(s)<br><br>Each will evaluate for 15 marks and average of all three is the marks awarded |
| <b>Literature review</b>                        | <ul style="list-style-type: none"> <li>Less technical papers are reviewed and less relevant</li> </ul>                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>Few technical papers are reviewed and moderately relevant</li> </ul>                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>At least 3 technical papers from reputed journals are made and reviews are quite relevant to the project work</li> </ul>                                                                                                                            |             |                                                                                                                                                           |
| <b>Presentation</b>                             | <ul style="list-style-type: none"> <li>Slides contain some errors, Not legible, flow is okay, body language is minimal, Response to the audience questions and comments are not good</li> </ul>                                                                                                     | <ul style="list-style-type: none"> <li>Slides are error free, flow is good, body language is acceptable, Responds to the audience questions and comments</li> </ul>                                                                                                                                                    | <ul style="list-style-type: none"> <li>Slides are error free, quite legible, flow is good, body language is good, Responds accurately to the audience questions and comments</li> </ul>                                                                                                    |             |                                                                                                                                                           |

**R2. Internal Evaluation (Before 15 days from the last working day of 7th semester of BE): Total Marks of 15**

| Evaluation Criteria                       | Score/Marks                                                                                                                                                                          |                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                     | Total Marks | Evaluation By                                                                                                                                             |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                           | Poor<br>(Needs Improvement)<br>(1)                                                                                                                                                   | Average<br>(Acceptable)<br>(3)                                                                                                                                                          | Very good<br>(Proficient)<br>(5)                                                                                                                                                                                                                                                    |             |                                                                                                                                                           |
| <b>Proposed design methodology</b>        | <ul style="list-style-type: none"> <li>Division of problem into modules and but improper selection of design approaches and design methodology and not properly justified</li> </ul> | <ul style="list-style-type: none"> <li>Division of problem into modules and but improper selection of design approaches and design methodology and not properly justified</li> </ul>    | <ul style="list-style-type: none"> <li>Division of problem into modules and good selection of design approaches, appropriate design methodology with proper justification</li> </ul>                                                                                                | 15          | Committee consisting of HOD/Nominee + Project Coordinator + Guide(s)<br><br>Each will evaluate for 15 marks and average of all three is the marks awarded |
| <b>Preliminary/Conceptual Design work</b> | <ul style="list-style-type: none"> <li>Very less efforts are made towards preliminary and conceptual design works to accomplish the work</li> </ul>                                  | <ul style="list-style-type: none"> <li>Efforts are made towards preliminary and conceptual design works to accomplish the work but some are not clear</li> </ul>                        | <ul style="list-style-type: none"> <li>Preliminary and conceptual design works are carried and are in proper direction to accomplish the project work</li> </ul>                                                                                                                    |             |                                                                                                                                                           |
| <b>Presentation and Report</b>            | <ul style="list-style-type: none"> <li>Slides are not organized, and Question-answer is poor, report has errors and not systematic</li> </ul>                                        | <ul style="list-style-type: none"> <li>Slides are good but not neatly arranged, delivery is good, Question-answer is average</li> <li>Report is not organized systematically</li> </ul> | <ul style="list-style-type: none"> <li>Slides are neat, delivery is good, Question-answer is very good, gestures and body languages are perfect</li> <li>Report is organized, and is according to the specified format</li> <li>References and citations are appropriate</li> </ul> |             |                                                                                                                                                           |

**R3. Evaluation by the guide (Towards the end of 7th semester of BE): Total Marks of 20**

| Evaluation Criteria                                        | Score/Marks                                                                                                                                                                             |                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                         | Total Marks | Evaluation By |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------|
|                                                            | Poor (1)                                                                                                                                                                                | Average (3)                                                                                                                                                                                             | Excellent (5)                                                                                                                                                                                                                                                                                                           |             |               |
| <b>Objectives and Feasibility study</b>                    | <ul style="list-style-type: none"> <li>Many possible objectives are left out and very few are stated</li> <li>Design steps are not feasible to accomplish all the objectives</li> </ul> | <ul style="list-style-type: none"> <li>Some objectives are stated clearly and some possible objectives are left out</li> <li>Design steps are less feasible to accomplish all the objectives</li> </ul> | <ul style="list-style-type: none"> <li>All the objectives are clearly and neatly stated</li> <li>Design steps to be followed to solve the defined problem are feasible to accomplish all the objectives</li> </ul>                                                                                                      | 20          | Guide(s)      |
| <b>Survey and Problem identification</b>                   | <ul style="list-style-type: none"> <li>Topics are surveyed randomly and less relevant to societal and environmental problem</li> </ul>                                                  | <ul style="list-style-type: none"> <li>Topics are surveyed and not fully relevant to society and environment problem</li> </ul>                                                                         | <ul style="list-style-type: none"> <li>Extensive survey is made and socially and environmentally relevant problem is identified</li> </ul>                                                                                                                                                                              |             |               |
| <b>Involvement in the work and ability to work in team</b> | <ul style="list-style-type: none"> <li>Less involved in the work</li> </ul>                                                                                                             | <ul style="list-style-type: none"> <li>Would have involved still more</li> </ul>                                                                                                                        | <ul style="list-style-type: none"> <li>Sincerely involved in the work and very hard working and has good interest</li> </ul>                                                                                                                                                                                            |             |               |
| <b>Individual Contribution and Peer/Guide interaction</b>  | <ul style="list-style-type: none"> <li>Lesser involvement and contribution</li> <li>Rarely met the guide and met on guide's call</li> </ul>                                             | <ul style="list-style-type: none"> <li>Contributed to the work to some extent</li> <li>Met the guide for interaction and Sincere and obedient to the guide's call and suggestions</li> </ul>            | <ul style="list-style-type: none"> <li>Good interaction and contributed in a big way</li> <li>Met the guide for interaction and Sincere and obedient to the guide's call and suggestions</li> <li>More frequently met the guide for interaction and Sincere and obedient to the guide's call and suggestions</li> </ul> |             |               |

**R4: SEE Evaluation for Project Phase-I (During SEE of 7th semester of BE): Total Marks of 50**

| Evaluation Criteria                                                          | Score/Marks                                                                                                                                                                                                                                     |                                                                                                                                                                                                |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                               | Total Marks | Evaluated by                                                                                                                                  |
|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                              | Needs improvement (Poor) (4)                                                                                                                                                                                                                    | Acceptable (Average) (6)                                                                                                                                                                       | Satisfactory (Good) (8)                                                                                                                                                                        | Proficient (Excellent) (10)                                                                                                                                                                                                                                                                   |             |                                                                                                                                               |
| <b>Identification of Problem Domain and Detailed analysis of Feasibility</b> | <ul style="list-style-type: none"> <li>Moderate explanation of the purpose and need of the project</li> <li>Explanation of the specifications and the limitations of the existing systems not very satisfactory; limited information</li> </ul> | <ul style="list-style-type: none"> <li>Average explanation of the purpose and need of the project;</li> <li>Moderate study of the existing systems; collects some basic information</li> </ul> | <ul style="list-style-type: none"> <li>Good explanation of the purpose and need of the project</li> <li>Collects a great deal of information and good study of the existing systems</li> </ul> | <ul style="list-style-type: none"> <li>Detailed and extensive explanation of the purpose and need of the project</li> </ul>                                                                                                                                                                   | 50          | HOD/nomination + Project coordinator + External examiner<br><br>Each will evaluate for 50 marks and average of all three is the marks awarded |
| <b>Objectives and Methodology of Project Proposal</b>                        | <ul style="list-style-type: none"> <li>Only Some objectives of the proposed work are well defined; Steps to be followed to solve the defined problem are not specified properly</li> </ul>                                                      | <ul style="list-style-type: none"> <li>Incomplete justification to the objectives proposed; Steps are mentioned but unclear; without justification to objectives</li> </ul>                    | <ul style="list-style-type: none"> <li>Good justification to the objectives; Methodology to be followed is specified but detailing is not done</li> </ul>                                      | <ul style="list-style-type: none"> <li>All objectives of the proposed work are well defined; Steps to be followed to solve the defined problem are clearly specified</li> <li>Detailed and extensive explanation of the specifications and the limitations of the existing systems</li> </ul> |             |                                                                                                                                               |
| <b>Design Methodology</b>                                                    | <ul style="list-style-type: none"> <li>Partial division of problem into modules and inappropriate selection of computing framework</li> </ul>                                                                                                   | <ul style="list-style-type: none"> <li>Division of problem into modules but inappropriate selection of computing Framework</li> </ul>                                                          | <ul style="list-style-type: none"> <li>Division of problem into modules and good selection of computing framework</li> <li>Design methodology not properly justified</li> </ul>                | <ul style="list-style-type: none"> <li>Division of problem into modules and good selection of computing framework</li> <li>Appropriate design methodology and</li> </ul>                                                                                                                      |             |                                                                                                                                               |

| Evaluation Criteria      | Score/Marks                                                                                                                                                              |                                                                                                                                                                          |                                                                                                                                                                                                                         |                                                                                                                                                                                                   | Total Marks | Evaluated by |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|
|                          | Needs improvement (Poor) (4)                                                                                                                                             | Acceptable (Average) (6)                                                                                                                                                 | Satisfactory (Good) (8)                                                                                                                                                                                                 | Proficient (Excellent) (10)                                                                                                                                                                       |             |              |
|                          | <ul style="list-style-type: none"> <li>Design methodology not defined properly</li> </ul>                                                                                | <ul style="list-style-type: none"> <li>Design methodology not defined properly</li> </ul>                                                                                |                                                                                                                                                                                                                         | properly justified                                                                                                                                                                                |             |              |
| Planning of Project Work | <ul style="list-style-type: none"> <li>Time frame not properly specified</li> </ul>                                                                                      | <ul style="list-style-type: none"> <li>Time frame properly specified, but not being Followed</li> </ul>                                                                  | <ul style="list-style-type: none"> <li>Time frame properly specified but being followed partly</li> </ul>                                                                                                               | <ul style="list-style-type: none"> <li>Time frame properly specified and being followed</li> </ul>                                                                                                |             |              |
| Presentation             | <ul style="list-style-type: none"> <li>Contents of presentations are appropriate but not well Arranged</li> <li>Eye contact with few people and unclear Voice</li> </ul> | <ul style="list-style-type: none"> <li>Contents of presentations are appropriate but not well Arranged</li> <li>Eye contact with few people and unclear Voice</li> </ul> | <ul style="list-style-type: none"> <li>Contents of presentations are appropriate but not well arranged</li> <li>Satisfactory demonstration, clear voice with good spoken language but eye contact not proper</li> </ul> | <ul style="list-style-type: none"> <li>Contents of presentations are appropriate and well arranged</li> <li>Proper eye contact with audience and clear voice with good spoken language</li> </ul> |             |              |

**R5: Project work progress review-I (Before one month from the start of 8th semester of BE): Total Marks of 15**

| Evaluation Criteria                             | Score/Marks                                                                                                                                                                                                             |                                                                                                                                                                                                                         |                                                                                                                                                                                                                      |                                                                                                                                                                                                                                          | Total Marks | Evaluated by                                                                                                                              |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------|
|                                                 | Needs improvement (Poor) (2)                                                                                                                                                                                            | Acceptable (Average) (3)                                                                                                                                                                                                | Satisfactory (Good) (4)                                                                                                                                                                                              | Proficient (Excellent) (5)                                                                                                                                                                                                               |             |                                                                                                                                           |
| Design methodology and planning of project work | <ul style="list-style-type: none"> <li>Division of problem into modules and improper selection of computing framework</li> <li>Design methodology not properly justified</li> <li>Time schedule is not clear</li> </ul> | <ul style="list-style-type: none"> <li>Division of problem into modules and improper selection of computing framework</li> <li>Design methodology not properly justified</li> <li>Time schedule is specified</li> </ul> | <ul style="list-style-type: none"> <li>Division of problem into modules and good selection of computing framework</li> <li>Design methodology not properly justified,</li> <li>Time schedule is specified</li> </ul> | <ul style="list-style-type: none"> <li>Division of problem into modules and good selection of computing framework,</li> <li>Appropriate design methodology and properly justification</li> <li>Time frame properly specified</li> </ul>  | 15          | HOD (or nomination) + Project coordinator + Guide(s)<br><br>Each will evaluate for 15 marks and average of all three is the marks awarded |
| Description of Concepts and Technical Details   | <ul style="list-style-type: none"> <li>Inappropriate explanation of the key concepts and poor description of the technical requirements of the project</li> </ul>                                                       | <ul style="list-style-type: none"> <li>Incomplete explanation of the key concepts and in-sufficient description of the technical requirements of the project</li> </ul>                                                 | <ul style="list-style-type: none"> <li>Complete explanation of the key concepts but in-sufficient description of the technical requirements of the project</li> </ul>                                                | <ul style="list-style-type: none"> <li>Complete explanation of the key concepts and strong description of the technical requirements of the project</li> </ul>                                                                           |             |                                                                                                                                           |
| Demonstration and presentation                  | <ul style="list-style-type: none"> <li>Contents of presentations are not appropriate and Demonstration not satisfactory</li> </ul>                                                                                      | <ul style="list-style-type: none"> <li>Contents of presentations are appropriate but not well arranged, eye contact with few people and unclear Voice</li> </ul>                                                        | <ul style="list-style-type: none"> <li>Contents of presentations are appropriate but not well arranged, satisfactory demonstration, clear voice with good spoken language but eye contact not proper</li> </ul>      | <ul style="list-style-type: none"> <li>Good demonstration of work so far carried-out, Contents of presentations are appropriate and well arranged, Proper eye contact with audience and clear voice with good spoken language</li> </ul> |             |                                                                                                                                           |

**R6: Project work progress review -II (Before 15 days from the last working day of 8th semester of BE): Total Marks of 15**

| Evaluation Criteria                                             | Score/Marks                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                   | Total Marks | Evaluated by                                                                                                                               |
|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                 | Needs improvement (Poor) (2)                                                                                                                                                                                                                                                | Acceptable (Average) (3)                                                                                                                                                                                                                                                                        | Satisfactory (Good) (4)                                                                                                                                                                                                                                                                                                       | Proficient (Excellent) (5)                                                                                                                                                                                                                                                        |             |                                                                                                                                            |
| <b>Incorporation of Suggestions made in the previous review</b> | <ul style="list-style-type: none"> <li>All major changes are made as per modifications suggested during previous evaluation</li> </ul>                                                                                                                                      | <ul style="list-style-type: none"> <li>All major changes are made as per modifications suggested during previous evaluation</li> </ul>                                                                                                                                                          | <ul style="list-style-type: none"> <li>Changes are made as per modifications suggested during previous evaluation and good justification</li> </ul>                                                                                                                                                                           | <ul style="list-style-type: none"> <li>Changes are made as per modifications suggested during the previous evaluation and new innovations added</li> </ul>                                                                                                                        | 15          | HOD (or nomination ) + Project coordinator + Guide(s)<br><br>Each will evaluate for 15 marks and average of all three is the marks awarded |
| <b>Discussion and Conclusion</b>                                | <ul style="list-style-type: none"> <li>Results are not presented properly, Project work is not summarized and concluded</li> <li>Future extensions in the project are not specified</li> </ul>                                                                              | <ul style="list-style-type: none"> <li>Results presented are not much satisfactory, Project work summary and conclusion not very appropriate</li> <li>Future extensions in the project are not specified</li> </ul>                                                                             | <ul style="list-style-type: none"> <li>Results are presented in good manner, Project work summary and conclusion not very appropriate</li> <li>Future extensions in the project are specified</li> </ul>                                                                                                                      | <ul style="list-style-type: none"> <li>Results are presented in very appropriate manner, Project work is well summarized and concluded,</li> <li>Future extensions in the project are well specified</li> </ul>                                                                   |             |                                                                                                                                            |
| <b>Demonstration and Presentation</b>                           | <ul style="list-style-type: none"> <li>Modules are not in proper working form that further leads to failure of integrated system, Contents of presentations are not appropriate and not well delivered</li> <li>Poor eye contact with audience and unclear voice</li> </ul> | <ul style="list-style-type: none"> <li>Modules are working well in isolation and properly demonstrated, Modules of project are not properly integrated, Contents of presentations are appropriate but not well delivered</li> <li>Eye contact with only few people and unclear voice</li> </ul> | <ul style="list-style-type: none"> <li>Each module working well and properly demonstrated, Integration of all modules not done and system working is not very satisfactory, Contents of presentations are appropriate and well delivered, Clear voice with good spoken language but less eye contact with audience</li> </ul> | <ul style="list-style-type: none"> <li>Each module working well and properly demonstrated, All modules of project are well integrated and system working is accurate, neatly presented with proper eye contact with audience and clear voice with good spoken language</li> </ul> |             |                                                                                                                                            |



**R7: Evaluation by the guide (Towards the end of 8th semester of BE): Total Marks of 20**

| Evaluation Criteria                                      | Score/Marks                                                                                                                                                   |                                                                                                                                                                |                                                                                                                                                                        |                                                                                                                                                                    | Total Marks | Evaluated by |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|
|                                                          | Needs improvement (Poor) (2)                                                                                                                                  | Acceptable (Average) (3)                                                                                                                                       | Satisfactory (Good) (4)                                                                                                                                                | Proficient (Excellent) (5)                                                                                                                                         |             |              |
| Technical Knowledge gained through project work          | <ul style="list-style-type: none"> <li>Poor knowledge and no awareness related to project</li> </ul>                                                          | <ul style="list-style-type: none"> <li>Lacks sufficient knowledge and Awareness</li> </ul>                                                                     | <ul style="list-style-type: none"> <li>Fair knowledge and awareness related to the project</li> </ul>                                                                  | <ul style="list-style-type: none"> <li>Extensive knowledge and awareness related to the project</li> </ul>                                                         | 20          | Guide(s)     |
| Regularity and Attendance                                | <ul style="list-style-type: none"> <li>Irregular and inconsistent in work</li> </ul>                                                                          | <ul style="list-style-type: none"> <li>Reports to the guide but lacks Consistency</li> </ul>                                                                   | <ul style="list-style-type: none"> <li>Reports to the guide very often but not very consistent</li> </ul>                                                              | <ul style="list-style-type: none"> <li>Reports to the guide regularly and consistent in work</li> </ul>                                                            |             |              |
| Incorporation of Suggestions made in the previous review | <ul style="list-style-type: none"> <li>All major changes are made as per modifications suggested during previous evaluation</li> </ul>                        | <ul style="list-style-type: none"> <li>All major changes are made as per modifications suggested during previous evaluation</li> </ul>                         | <ul style="list-style-type: none"> <li>Changes are made as per modifications suggested during previous evaluation and good justification</li> </ul>                    | <ul style="list-style-type: none"> <li>Changes are made as per modifications suggested during the previous evaluation and new innovations added</li> </ul>         |             |              |
| Organization and structure of Project Report             | <ul style="list-style-type: none"> <li>Project report not prepared according to the specified format, References and citations are not appropriate</li> </ul> | <ul style="list-style-type: none"> <li>Project report is according to the specified format but some mistakes, Insufficient references and citations</li> </ul> | <ul style="list-style-type: none"> <li>Project report is according to the specified format, References and citations are appropriate but not mentioned well</li> </ul> | <ul style="list-style-type: none"> <li>Project report is according to the specified format, References and citations are appropriate and well mentioned</li> </ul> |             |              |

**R8: SEE Evaluation for Project Phase-II (During SEE of 8th semester of BE): Total Marks of 50**

| Evaluation Criteria               | Score                                                                                                                                                                                                  |                                                                                                                                                                                                                        |                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                   | Total Marks | Evaluation By                                                                                                                                                            |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                   | Needs improvement (Poor) (2)                                                                                                                                                                           | Acceptable (Average) (3)                                                                                                                                                                                               | Satisfactory (Good) (4)                                                                                                                                                                                          | Proficient (Excellent) (5)                                                                                                                                                                                                                                        |             |                                                                                                                                                                          |
| <b>Presentation</b>               | <ul style="list-style-type: none"> <li>Contents of presentations are not appropriate and not well delivered, Poor eye contact with audience and unclear voice</li> </ul>                               | <ul style="list-style-type: none"> <li>Contents of presentations are appropriate but not well delivered, Eye contact with only few people and unclear voice</li> </ul>                                                 | <ul style="list-style-type: none"> <li>Contents of presentations are appropriate and well delivered, Clear voice with good spoken language but less eye contact with audience</li> </ul>                         | <ul style="list-style-type: none"> <li>Contents of presentations are appropriate and well delivered, Proper eye contact with audience and clear voice with good spoken language</li> </ul>                                                                        | 50          | HOD/<br>nomination<br>+ Project<br>coordinator + External<br>Examiner<br><br>Each will<br>evaluate<br>for 50<br>marks and<br>average of<br>all three<br>will be<br>taken |
| <b>Designs and implementation</b> | <ul style="list-style-type: none"> <li>Proper design methodology is not followed resulting into poor design, No modern tools are used to implement, Work contributes very less to the world</li> </ul> | <ul style="list-style-type: none"> <li>Proper design methodology is followed, Design lacks, very less modern tools are used to implement, the work contributes to the world in little way</li> </ul>                   | <ul style="list-style-type: none"> <li>Proper design methodology is followed, Design is done but not perfect, few modern tools are used to implement, the work contributes to the world in some way</li> </ul>   | <ul style="list-style-type: none"> <li>Proper design methodology is followed, Design is perfect, Modern tools are used to implement, the work contributes to the world in greater way</li> </ul>                                                                  |             |                                                                                                                                                                          |
| <b>Results and Demonstration</b>  | <ul style="list-style-type: none"> <li>Some of the defined objectives are achieved</li> <li>Modules are not in proper working form that further leads to failure of integrated system</li> </ul>       | <ul style="list-style-type: none"> <li>All defined objectives are achieved</li> <li>Modules are working well in isolation and properly demonstrated</li> <li>Modules of project are not properly integrated</li> </ul> | <ul style="list-style-type: none"> <li>All defined objectives are achieved and working well and demonstrated</li> <li>Integration of all modules not done and system working is not very satisfactory</li> </ul> | <ul style="list-style-type: none"> <li>All defined objectives are achieved and evident from the results</li> <li>Each module working well and properly demonstrated</li> <li>All modules of project are well integrated and system working is accurate</li> </ul> |             |                                                                                                                                                                          |

| Evaluation Criteria   | Score                                                                                                                                                                 |                                                                                                                                                                         |                                                                                                                                                            |                                                                                                                                                                            | Total Marks | Evaluation By |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------|
|                       | Needs improvement (Poor) (2)                                                                                                                                          | Acceptable (Average) (3)                                                                                                                                                | Satisfactory (Good) (4)                                                                                                                                    | Proficient (Excellent) (5)                                                                                                                                                 |             |               |
| <b>Project report</b> | <ul style="list-style-type: none"> <li>Project report not prepared according to the specified format</li> <li>References and citations are not appropriate</li> </ul> | <ul style="list-style-type: none"> <li>Project report is according to the specified format but some mistakes</li> <li>In-sufficient references and citations</li> </ul> | <ul style="list-style-type: none"> <li>Project report is according to the specified format</li> <li>References and citations not mentioned well</li> </ul> | <ul style="list-style-type: none"> <li>Project report is according to the specified format</li> <li>References and citations are appropriate and well mentioned</li> </ul> |             |               |
| <b>Viva - Voce</b>    | <ul style="list-style-type: none"> <li>Answered few questions related to design, implementation and applications of project work</li> </ul>                           | <ul style="list-style-type: none"> <li>Answered some questions related to design, implementation and applications of project work</li> </ul>                            | <ul style="list-style-type: none"> <li>Answered 80% of the questions related to design, implementation and applications of project work</li> </ul>         | <ul style="list-style-type: none"> <li>Answered all the questions related to design, implementation and applications of project work</li> </ul>                            |             |               |

**E. Quality of completed projects/working prototypes**

At the end of the academic year, the project exhibition is conducted through which student project will be exhibited before expert committee. The committee members are chosen from industry, senior faculty of the department, and other department. The committee evaluates based on various parameters for award of prizes (first, second, and third).



In 2018-19, the “Project Expo-19” was organised for final year students. The total 22 projects participated and committee identified three projects for award of prizes. The following are the details of the project expo-19 as shown in table 2.10.

**Table 2.10. Project award details for the academic year 2018-19**

| Sl. No. | Name of the Student                                                                  | Name of the Project                              | Award  |
|---------|--------------------------------------------------------------------------------------|--------------------------------------------------|--------|
| 01      | Vidyashree Udipi<br>Suman herkal<br>Anand Karnandi<br>Subham Zanwar                  | Automatic Grading of Mangoes Using Deep Learning | First  |
| 02      | Spoorthi M., kumatagi<br>Rajeshwari Oni<br>Sharanamma A. Dodamani<br>Shreya Naragund | Rasberry Pi based readers for Blind              | Second |
| 03      | Aishwarya Kovalli<br>Bhagyashree V. Pawar<br>Ganga Hadagali<br>Madhu Dodamani        | Smart Vehicle                                    | Third  |

In 2020-21, the “Project Expo-21” was organised for final year students. The total 25 projects participated and committee identified three projects for award of prizes. The following are the details of the project expo-21 as shown in table .

**Table 2.11. Project award details for the academic year 2020-21**

| Sl. No. | Name of the Student                                         | Name of the project                     | Award  |
|---------|-------------------------------------------------------------|-----------------------------------------|--------|
| 01      | Sushma K.<br>Aishwarya C.<br>Basavannevv D.<br>Deepa S.     | Smart Home Automation System            | First  |
| 02      | Pratima D.<br>Anusha A. K.<br>Poornima B.<br>Prafulla M. H. | Smart Bottle Monitoring System          | Second |
| 03      | Aishwarya A.<br>Jotshna K.<br>Laxmee M.                     | Insurance Fraud Detection using machine | Third  |

The following project is selected for funding by VTU, Belagavi in the academic year 2020-21, as shown in table 2.12.

**Table 2.12. The financial supported project**

| Sl. No. | Name of the Student                                          | Name of the project                     | Guide           | Sanctioned Amount |
|---------|--------------------------------------------------------------|-----------------------------------------|-----------------|-------------------|
| 01      | Prathiksha P.<br>Bhagyawant B.<br>Vidyashri M.<br>Kishore P. | Driver Less Car with End-Lane Detection | Dr. S. R. Patil | Rs. 5,000.00      |

#### F. Evidence of papers published/Awards received by projects

The following table 2.13.shows the list of student publications.

**Table 2.13. Student paper publications**

| Sl. No. | Name of the Faculty                                                 | Title of the Paper             | Title of the Journal                                                                           | International/National | ISSN/ISBN | Vol. No., PP., Year, DOI, Scopus, WoS, DBLP, Google Scholar |
|---------|---------------------------------------------------------------------|--------------------------------|------------------------------------------------------------------------------------------------|------------------------|-----------|-------------------------------------------------------------|
| 1       | S. R. Patil, Kishore P., Prathiksha P., Bhagyawant B., Vidyashri M. | A Review on 100-point Activity | International Journal of Advanced Research in Science, Communication and Technology (IJAR SCT) | International          | 2581-9429 | 8,4,47-50,2020, XX.082020/IJAR SCT<br>Google Scholar        |

## 2.2.4 Initiatives related to industry interaction (10)

Institute Marks : 10.00

### A. Industry supported laboratories

The institute has the following industry attached laboratories:

1. **BEC BOSCH Rexroth Centre for industrial automation** - In the center the students are trained towards industrial automation.
2. **INTEL Intelligent Systems Laboratory** - Students are utilizing the lab facilities to do the course assignments and project works.
3. **Nokia Innovation Lab** - The Simulation lab for next generation mobile networks.
4. **IIPC (Industry institute partnership cell)** - The institute has IIPC through which some of the final year students get internships in industries. IIPC conducts activities like training programs from industry persons, Placement enhancement activities. Industry conclaves are organized to increase industry exposure to students.
5. **CED (Centre for Entrepreneurship Development)** - Many training and awareness programs on Entrepreneurship Development are organized by CED at college level and our students are participating and gaining benefit.
6. **STEP (Science and Technology Entrepreneurship Park)** - Incubation facility is provided by the Science and Technology Entrepreneurs Park (STEP) which works under the aegis of BEC. About 25 virtual incubates per year are utilizing the Technology Business Incubator (TBI) facilities in the following areas:
  - Food processing
  - Textile (handloom and power loom)
  - Building technology

The department also organizes entrepreneurship awareness programs, seminars/webinars and workshops in association with persons from industry and academia.

### B. Industry involvement in the program design and curriculum

The experts from industry are involved in designing program curriculum as members of board of studies. Their suggestions are incorporated in the curriculum. The following table shows the list of industry experts.

**Table 2.14. List of industry experts**

| Sl. No. | Academic Year             | Name, Designation, and Address                                                                                                                                                                                                                                                                                                                      |
|---------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01      | 2018-19<br>and<br>2019-20 | <b>1. Mr. VIRUPAKSH. GUDAGUNTI,</b><br><br>Technical Manager Automation<br>Prime Soft IP Solutions Pvt. Ltd., Bengaluru,<br>Email id: virupaksh.sg@gmail.com, Ph: 9177725907<br><br><b>2. Smt. SHASHIKALA J. B.</b><br><br>Senior Consultant, International Business Machines (IBM), Bengaluru,<br>Email id: sharvind@in.ibm.com,<br>Ph: 9902601188 |

|    |                           |                                                                                                                                                                                                |
|----|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 02 | 2020-21<br>and<br>2021022 | <b>1. Dr. DEVIPRASAD M.</b><br><br>Vice President, Robosoft Technologies Pvt. Ltd. Udapi, Karnataka.<br><br>Email Id: dprasadm@gmail.com<br><br>Ph. 9591429050                                 |
|    |                           | <b>2. Shri. SANTOSHKUMAR HANAJI</b><br><br>Co-founder, Nggawe Nirman Technologies Private Ltd. Bengaluru, Karnataka.<br><br>Email Id: santosh.hanaji@gmail.com<br><br>Ph.No.: +91-9886300546   |
|    |                           | <b>3. Shri. CHANANABASAVARAJ RARAVI</b><br><br>Technical Lead, Intel Technology Ltd.<br><br>Bangalore - 560103<br><br>Email Id: channabasavaraj.raravi@gmail.com<br><br>Ph.No.: +91-9886300546 |

### 2.2.5 Initiatives related to industry internship/summer training (10)

Institute Marks : 10.00

An initiative has been made by introducing internship in the curriculum for 1 credit instead of the seminar in 8<sup>th</sup> semester. The students are encouraged to take internship program during their semester break between 6<sup>th</sup> and 7<sup>th</sup> semesters. Faculty members give their guidelines, suggestions, and scope and contact details of an internship. They also help the students by interacting with the industrial experts, provide the students recommendation letters and other necessary supports. The alumni coordinator constantly interacts with alumni those who are working in the industries and request them to provide necessary guidelines and supports for their junior's internship. The students have to present a seminar in 8<sup>th</sup> semester on the work done during their internship and the evaluation done based on various parameters.

From the academic year 2018-19, the industry internship has been made mandatory for 175 credits scheme. There are several MoUs in Institution and department levels to fulfill this madatory requirement. The following list of MoUs are:

#### MoUs:

##### A. The MoUs associated with Institute/Programme are listed below:

- Global edge technology.
- Tata Consultancy Services.
- New Age Incubation Center in Engineering Colleges through KBITS, Government of Karnataka.

##### B. The department has MoUs with various industries under which Internships, Placement/ Placement Trainings, SDPs, Technical Talks, etc., are conducted.

###### 1. The MoUs associated with the programme

- Transsible, Mumbai.
- Smartec iT Solutions, Hubli-Dharwad
- Insystel Technology Solutions, Pune
- Tech Fortune Technologies, Bengaluru
- Gbuits Innovations Pvt. Ltd, Vijayapur

###### 2. The MoUs associated with Institution

- Mind Vision Technologies Ltd., Bagalkot

The following table 2.15 shows Impact of MoUs.

**Table 2.15.Impact analysis of MoUs**

| Sl. No. | Academic Year | Industry Name and Address                           | No. of Students attended for Training/Internship | Impact                                                                         |
|---------|---------------|-----------------------------------------------------|--------------------------------------------------|--------------------------------------------------------------------------------|
| 01      | 2018-19       | Xcelerator<br>Ninja Technology Pvt. Ltd., Bangalore | 09                                               | Improvement in Placement.<br><br>All students are able to undergo Internships. |
| 02      | 2019-20       | Xcelerator<br>Ninja Technology Pvt. Ltd., Bangalore | 15                                               |                                                                                |
|         |               | BSNL RTTC, Mysore                                   | 07                                               |                                                                                |
|         |               | Drona Automations Pvt. Ltd. Bangalore               | 01                                               |                                                                                |
| 03      | 2020-21       | Insystel Technology Pvt. Ltd. Solutions, Pune       | 26                                               |                                                                                |
|         |               | SmartKnower Technology Pvt. Ltd., Bangalore         | 04                                               |                                                                                |
|         |               | Mindvision Technologies Pvt. Ltd. Bagalkot          | 16                                               |                                                                                |
|         |               | Sianom Technology Pvt. Ltd., Bangalore              | 05                                               |                                                                                |
|         |               | SmarTec IT Solutions, Hubli                         | 37                                               |                                                                                |

Apart from improvement in placement, there are other intangible impacts mentioned below:

- Gain Valuable Work Experience
- Have an Edge in the Job Market
- Transition into a Job
- Networking Opportunities
- Apply Classroom Knowledge
- Gain Confidence
- Industry-Institution Partnership Cell (IIPC) is established at the institute level to identify and establish linkages with the industries/firms.
- Students of the programme will be deputed to carry out real time projects and undergo internship.

### 3 COURSE OUTCOMES AND PROGRAM OUTCOMES (175)

Total Marks 175.00

#### Define the Program specific outcomes

:

|             |                                                                                                                                                                               |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PSO1</b> | To demonstrate the abilities to apply the basic science and engineering fundamentals to solve complex engineering problems in the society.                                    |
| <b>PSO2</b> | To demonstrate the abilities to provide information and communication technology solutions using modern engineering and IT tools at affordable cost working as a team member. |
| <b>PSO3</b> | To exhibit ethical, social and professional responsibilities and engage in life long learning.                                                                                |

**3.1 Establish the correlation between the courses and the Program Outcomes (POs) & Program Specific Outcomes (25)**

Total Marks 25.00

Institute Marks : 25.00

|                         |        |        |        |
|-------------------------|--------|--------|--------|
| No. of Core Courses : 6 | C2 : 2 | C3 : 2 | C4 : 2 |
|-------------------------|--------|--------|--------|

**Note : Number of Outcomes for a Course is expected to be around 6.**

|                      |              |                      |                  |
|----------------------|--------------|----------------------|------------------|
| <b>Course Name :</b> | <b>C2 01</b> | <b>Course Year :</b> | <b>2018-2019</b> |
|----------------------|--------------|----------------------|------------------|

| <b>Course Name</b> | <b>Statements</b>               |
|--------------------|---------------------------------|
| C2 01.1            | Computer Organization - UIS314C |

|                      |              |                      |                  |
|----------------------|--------------|----------------------|------------------|
| <b>Course Name :</b> | <b>C2 02</b> | <b>Course Year :</b> | <b>2018-2019</b> |
|----------------------|--------------|----------------------|------------------|

| <b>Course Name</b> | <b>Statements</b>                           |
|--------------------|---------------------------------------------|
| C2 02.1            | Analysis and Design of Algorithms - UIS403C |

|                      |              |                      |                  |
|----------------------|--------------|----------------------|------------------|
| <b>Course Name :</b> | <b>C3 01</b> | <b>Course Year :</b> | <b>2019-2020</b> |
|----------------------|--------------|----------------------|------------------|

| <b>Course Name</b> | <b>Statements</b>                     |
|--------------------|---------------------------------------|
| C3 01.1            | Database Management Systems - UIS503C |

|                      |              |                      |                  |
|----------------------|--------------|----------------------|------------------|
| <b>Course Name :</b> | <b>C3 02</b> | <b>Course Year :</b> | <b>2019-2020</b> |
|----------------------|--------------|----------------------|------------------|

| <b>Course Name</b> | <b>Statements</b>         |
|--------------------|---------------------------|
| C3 02.1            | Web Programming - UIS608C |

|                      |              |                      |                  |
|----------------------|--------------|----------------------|------------------|
| <b>Course Name :</b> | <b>C4 01</b> | <b>Course Year :</b> | <b>2020-2021</b> |
|----------------------|--------------|----------------------|------------------|

| <b>Course Name</b> | <b>Statements</b>                            |
|--------------------|----------------------------------------------|
| C4 01.1            | Object Oriented Modeling and Design -UIS702C |

|                      |              |                      |                  |
|----------------------|--------------|----------------------|------------------|
| <b>Course Name :</b> | <b>C4 02</b> | <b>Course Year :</b> | <b>2020-2021</b> |
|----------------------|--------------|----------------------|------------------|

| <b>Course Name</b> | <b>Statements</b>          |
|--------------------|----------------------------|
| C4 02.1            | Project Phase-II - UIS806P |

## Course Articulation Matrix

## 1 . course name : C201

| Course         | Statements | PO1         | PO2         | PO3         | PO4         | PO5         | PO6         | PO7         | PO8         | PO9         | PO10        | PO11        | PO12        |
|----------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| C201.1         | Computer C | 1 ▾         | 2 ▾         | 2 ▾         | 2 ▾         | - ▾         | - ▾         | - ▾         | - ▾         | - ▾         | - ▾         | - ▾         | 1 ▾         |
| <b>Average</b> |            | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

## 2 . course name : C202

| Course         | Statements  | PO1         | PO2         | PO3         | PO4         | PO5         | PO6         | PO7         | PO8         | PO9         | PO10        | PO11        | PO12        |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| C202.1         | Analysis an | 2 ▾         | 2 ▾         | 3 ▾         | 1 ▾         | - ▾         | - ▾         | - ▾         | - ▾         | - ▾         | - ▾         | - ▾         | 1 ▾         |
| <b>Average</b> |             | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

## 3 . course name : C301

| Course         | Statements | PO1         | PO2         | PO3         | PO4         | PO5         | PO6         | PO7         | PO8         | PO9         | PO10        | PO11        | PO12        |
|----------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| C301.1         | Database M | 1 ▾         | 3 ▾         | 2 ▾         | 3 ▾         | 1 ▾         | - ▾         | - ▾         | - ▾         | - ▾         | - ▾         | - ▾         | 1 ▾         |
| <b>Average</b> |            | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

## 4 . course name : C302

| Course         | Statements | PO1         | PO2         | PO3         | PO4         | PO5         | PO6         | PO7         | PO8         | PO9         | PO10        | PO11        | PO12        |
|----------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| C302.1         | Web Progr  | 1 ▾         | 2 ▾         | 3 ▾         | 3 ▾         | 2 ▾         | 1 ▾         | - ▾         | - ▾         | - ▾         | - ▾         | - ▾         | 1 ▾         |
| <b>Average</b> |            | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

## 5 . course name : C401

| Course         | Statements  | PO1         | PO2         | PO3         | PO4         | PO5         | PO6         | PO7         | PO8         | PO9         | PO10        | PO11        | PO12        |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| C401.1         | Object Orie | 1 ▾         | 3 ▾         | 3 ▾         | 2 ▾         | 2 ▾         | - ▾         | - ▾         | - ▾         | - ▾         | - ▾         | - ▾         | 1 ▾         |
| <b>Average</b> |             | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

## 6 . course name : C402

| Course         | Statements  | PO1         | PO2         | PO3         | PO4         | PO5         | PO6         | PO7         | PO8         | PO9         | PO10        | PO11        | PO12        |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| C402.1         | Project Pha | 2 ▾         | 3 ▾         | 3 ▾         | 3 ▾         | 2 ▾         | 2 ▾         | 2 ▾         | 3 ▾         | 3 ▾         | 3 ▾         | 3 ▾         | 2 ▾         |
| <b>Average</b> |             | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

**1 . Course Name : C201**

| Course         | PSO1        | PSO2        | PSO3        |
|----------------|-------------|-------------|-------------|
| C201.1         | 1 ▾         | 3 ▾         | 2 ▾         |
| <b>Average</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

**2 . Course Name : C202**

| Course         | PSO1        | PSO2        | PSO3        |
|----------------|-------------|-------------|-------------|
| C202.1         | 1 ▾         | 3 ▾         | 1 ▾         |
| <b>Average</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

**3 . Course Name : C301**

| Course         | PSO1        | PSO2        | PSO3        |
|----------------|-------------|-------------|-------------|
| C301.1         | 1 ▾         | 3 ▾         | 1 ▾         |
| <b>Average</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

**4 . Course Name : C302**

| Course         | PSO1        | PSO2        | PSO3        |
|----------------|-------------|-------------|-------------|
| C302.1         | 1 ▾         | 3 ▾         | 1 ▾         |
| <b>Average</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |

**5 . Course Name : C401**

| Course         | PSO1        | PSO2        | PSO3        |
|----------------|-------------|-------------|-------------|
| C401.1         | 1 ▾         | 3 ▾         | 1 ▾         |
| <b>Average</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> |



## 6 . Course Name : C402

| Course  | PSO1   | PSO2   | PSO3   |
|---------|--------|--------|--------|
| C402.1  | 1    ▾ | 3    ▾ | 2    ▾ |
| Average | 0.00   | 0.00   | 0.00   |

## Program Articulation Matrix

| Course | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| C201.1 | 1   | 2   | 2   | 2   | 0   | 0   | 0   | 0   | 0   | 0    | 0    | 1    |
| C201.2 | 2   | 2   | 3   | 2   | 0   | 0   | 0   | 0   | 0   | 0    | 0    | 1    |
| C201.3 | 2   | 2   | 2   | 2   | 0   | 2   | 0   | 0   | 0   | 0    | 0    | 1    |
| C201.4 | 2   | 2   | 2   | 2   | 0   | 0   | 0   | 1   | 0   | 0    | 0    | 1    |
| C201.5 | 2   | 1   | 3   | 1   | 1   | 0   | 1   | 0   | 0   | 0    | 0    | 1    |
| C201.6 | 1   | 1   | 2   | 1   | 1   | 3   | 1   | 0   | 0   | 0    | 0    | 1    |
| C201.7 | 2   | 2   | 0   | 2   | 0   | 1   | 0   | 0   | 0   | 0    | 0    | 1    |
| C201.8 | 1   | 2   | 2   | 2   | 2   | 1   | 1   | 0   | 2   | 1    | 1    | 1    |
| C202.1 | 2   | 2   | 3   | 1   | 0   | 0   | 0   | 0   | 0   | 0    | 0    | 1    |
| C202.2 | 2   | 2   | 3   | 2   | 0   | 0   | 0   | 0   | 0   | 0    | 0    | 1    |
| C202.3 | 2   | 2   | 2   | 2   | 0   | 0   | 0   | 0   | 0   | 0    | 0    | 1    |
| C202.4 | 2   | 2   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 0    | 1    |
| C202.5 | 1   | 2   | 3   | 3   | 2   | 1   | 0   | 0   | 0   | 0    | 0    | 1    |
| C202.6 | 2   | 2   | 2   | 2   | 0   | 0   | 0   | 0   | 0   | 0    | 0    | 1    |
| C202.7 | 2   | 2   | 2   | 2   | 1   | 0   | 0   | 0   | 0   | 0    | 0    | 1    |
| C202.8 | 0   | 3   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 3    | 0    | 2    |
| C301.1 | 1   | 3   | 2   | 3   | 1   | 0   | 0   | 0   | 0   | 0    | 0    | 1    |
| C301.2 | 2   | 2   | 2   | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 0    | 1    |
| C301.3 | 1   | 2   | 3   | 3   | 2   | 1   | 0   | 0   | 0   | 0    | 0    | 1    |
| C301.4 | 1   | 2   | 3   | 3   | 1   | 0   | 0   | 1   | 0   | 0    | 1    | 1    |
| C301.5 | 1   | 2   | 2   | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 0    | 1    |
| C301.6 | 1   | 2   | 3   | 3   | 2   | 2   | 0   | 0   | 0   | 0    | 0    | 1    |

|         |   |   |   |   |   |   |   |   |   |   |   |   |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|
| C301.7  | 1 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| C301.8  | 2 | 2 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| C301.9  | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 2 |
| C302.1  | 1 | 2 | 3 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| C302.2  | 2 | 2 | 3 | 2 | 3 | 1 | 1 | 0 | 1 | 1 | 1 | 2 |
| C302.3  | 1 | 2 | 3 | 2 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| C302.5  | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| C302.6  | 2 | 2 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| C302.7  | 2 | 2 | 3 | 2 | 3 | 1 | 1 | 0 | 1 | 1 | 1 | 2 |
| C302.8  | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| C302.9  | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 |
| C302.10 | 1 | 1 | 2 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| C401.1  | 1 | 3 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| C401.2  | 2 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 |
| C401.3  | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 0 | 0 | 1 |
| C401.4  | 1 | 2 | 1 | 2 | 1 | 2 | 3 | 1 | 3 | 2 | 3 | 3 |
| C401.5  | 1 | 1 | 1 | 1 | 0 | 3 | 2 | 3 | 3 | 3 | 3 | 3 |
| C401.6  | 1 | 3 | 3 | 3 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| C401.7  | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| C401.8  | 1 | 1 | 3 | 3 | 2 | 2 | 0 | 1 | 1 | 0 | 0 | 1 |
| C401.9  | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 |
| C402.1  | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 |
| C402.2  | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| C402.3  | 1 | 2 | 2 | 3 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| C402.4  | 1 | 1 | 2 | 2 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| C402.5  | 2 | 3 | 0 | 1 | 3 | 3 | 0 | 3 | 1 | 3 | 0 | 1 |
| C401.10 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 1 | 0 | 1 |
| C302.4  | 3 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |

| Course | PSO1 | PSO2 | PSO3 |
|--------|------|------|------|
| C201.1 | 1    | 3    | 2    |
| C201.2 | 1    | 3    | 1    |

|         |   |   |   |
|---------|---|---|---|
| C201.3  | 2 | 2 | 0 |
| C201.4  | 1 | 2 | 1 |
| C201.5  | 1 | 3 | 1 |
| C201.6  | 1 | 3 | 1 |
| C201.7  | 2 | 2 | 0 |
| C201.8  | 2 | 2 | 1 |
| C202.1  | 1 | 3 | 1 |
| C202.2  | 2 | 1 | 1 |
| C202.3  | 2 | 2 | 2 |
| C202.4  | 2 | 1 | 1 |
| C202.5  | 1 | 3 | 1 |
| C202.6  | 2 | 2 | 1 |
| C202.7  | 2 | 3 | 1 |
| C202.8  | 1 | 3 | 3 |
| C301.1  | 1 | 3 | 1 |
| C301.2  | 2 | 2 | 1 |
| C301.3  | 1 | 3 | 1 |
| C301.4  | 1 | 2 | 1 |
| C301.5  | 1 | 2 | 1 |
| C301.6  | 1 | 1 | 1 |
| C301.7  | 1 | 2 | 1 |
| C301.8  | 1 | 1 | 1 |
| C301.9  | 1 | 3 | 3 |
| C302.1  | 1 | 3 | 1 |
| C302.10 | 1 | 2 | 1 |
| C302.2  | 2 | 3 | 1 |
| C302.3  | 1 | 2 | 1 |
| C302.4  | 3 | 3 | 2 |
| C302.5  | 2 | 2 | 1 |
| C302.6  | 1 | 3 | 2 |
| C302.7  | 2 | 3 | 1 |

|         |   |   |   |
|---------|---|---|---|
| C302.8  | 1 | 3 | 3 |
| C302.9  | 1 | 3 | 2 |
| C401.1  | 1 | 3 | 1 |
| C401.10 | 1 | 2 | 1 |
| C401.2  | 1 | 2 | 1 |
| C401.3  | 1 | 2 | 1 |
| C401.4  | 1 | 2 | 1 |
| C401.5  | 1 | 3 | 2 |
| C401.6  | 1 | 2 | 1 |
| C401.7  | 1 | 2 | 1 |
| C401.8  | 1 | 3 | 1 |
| C401.9  | 1 | 3 | 2 |
| C402.1  | 1 | 3 | 2 |
| C402.2  | 1 | 3 | 1 |
| C402.3  | 1 | 2 | 1 |
| C402.4  | 1 | 3 | 1 |
| C402.5  | 1 | 3 | 3 |

**3.2 Attainment of Course Outcomes (75)**

Total Marks 75.00

Institute Marks : 10.00

Describe different assessment tools (semester end examinations, mid-semester tests, laboratory examinations, student portfolios etc.) to measure the student learning and hence attainment of course outcomes. (Student portfolio is a collection of artifacts that demonstrate skills, personal characteristics and accomplishments created by the student during study period.)

The process adopted to map the assessment questions, parameters of assessment rubrics etc. to the course outcomes to be explained with examples. The process of data collection from different assessment tools and the analysis of collected data to arrive at CO attainment levels need to be explained with examples

**Assessment Tools:****Continuous Internal Assessment (45 marks for theory courses, 50 marks for laboratory courses, projects and seminars) - CIE**

A teacher compiles the data of continuous internal (I,II & III) assessment in his or her subject. The teacher then enters the marks through the online software provided by the institute. Three hard copies are signed, one for examination section, one for department and one for self.

**Semester End Assessment (50 marks for all courses, 50 marks for laboratory courses, projects and seminars) - SEE**

The data of semester end assessment of a subject is compiled by internal and external teacher. The teacher then enters the marks through the online software provided by the institute. One hard copy is signed and is submitted to the department. These records are maintained by examination section.

**Assignments/Quizzes/MCQs/Group Works (for 5 marks, 10 marks from the academic year 2020-21)**

Any or all of these may be used as decided by the respective course teacher. The teacher also decides the number of assignments, quizzes, MCQ based tests and group works during the semester.

**3.2.2 Record the attainment of Course Outcomes of all courses with respect to set attainment levels (65)**

Institute Marks : 65.00

**Measuring Course Outcomes attained through Semester End Examinations (SEE)**

Course outcomes of all courses of Information Science and Engineering programme are obtained for the assessment years.

The procedure used to calculate CO attainment percentage and hence the levels is as below:

**Step-1:** COs are mapped on respective SEE question papers.

**Step-2:** The total marks are assigned to each CO is calculated.

**Step-3:** The total marks scored by student against each CO is calculated.

**Step- 4:** The CO attainment percentage is calculated as below:

$$\text{Percentage Attainment of CO}_i = (\text{Marks scored by students for CO}_i / \text{Total marks assigned to CO}_i) \times 100$$

Where, i = 1, 2, 3,.....number of COs

**Step- 5:** The following method has been adopted for Attainment Levels for Semester End Examination(SEE).

- **Attainment Level 3:**  $\geq 60\%$
- **Attainment Level 2:**  $\geq 40\%$
- **Attainment Level 1:**  $< 40\%$

A sample evaluation of CO attainment with respect to SEE marks is given in the below table 3.1.

**Table 3.1. Evaluation of CO attainment through SEE**

| SEE | Questions         | Marks CO1 | Marks scored by students | Marks CO2 | Marks scored by students | Marks CO3 | Marks scored by students | Marks CO4 | Marks scored by students | Marks CO5 | Marks scored by students | Marks CO6 | Marks scored by students |
|-----|-------------------|-----------|--------------------------|-----------|--------------------------|-----------|--------------------------|-----------|--------------------------|-----------|--------------------------|-----------|--------------------------|
| SEE | UNIT-I            |           |                          |           |                          |           |                          |           |                          |           |                          |           |                          |
|     | Q.No.1            | A.        | 8                        | 7         |                          |           |                          |           |                          |           |                          |           |                          |
|     |                   | B.        |                          |           | 8                        | 6         |                          |           |                          |           |                          |           |                          |
|     |                   | C.        | 4                        | 3         |                          |           |                          |           |                          |           |                          |           |                          |
|     |                   | D.        |                          |           |                          |           |                          |           |                          |           |                          |           |                          |
|     | Q.No.2            | A.        |                          |           | 8                        | 8         |                          |           |                          |           |                          |           |                          |
|     |                   | B.        |                          |           | 8                        | 6         |                          |           |                          |           |                          |           |                          |
|     |                   | C.        |                          |           | 4                        | 2         |                          |           |                          |           |                          |           |                          |
|     |                   | D.        |                          |           |                          |           |                          |           |                          |           |                          |           |                          |
|     | UNIT-II           |           |                          |           |                          |           |                          |           |                          |           |                          |           |                          |
|     | Q.No.3            | A.        |                          |           |                          | 8         | 6                        |           |                          |           |                          |           |                          |
|     |                   | B.        |                          |           |                          | 4         | 1                        |           |                          |           |                          |           |                          |
|     |                   | C.        |                          |           |                          | 8         | 6                        |           |                          |           |                          |           |                          |
|     |                   | D.        |                          |           |                          |           |                          |           |                          |           |                          |           |                          |
|     | Q.No.4            | A.        |                          |           |                          | 8         |                          |           |                          |           |                          |           |                          |
|     |                   | B.        |                          |           |                          |           |                          | 8         |                          |           |                          |           |                          |
|     |                   | C.        |                          |           |                          |           |                          | 4         |                          |           |                          |           |                          |
|     |                   | D.        |                          |           |                          |           |                          |           |                          |           |                          |           |                          |
|     | UNIT-III          |           |                          |           |                          |           |                          |           |                          |           |                          |           |                          |
|     | Q.No.5            | A.        |                          |           |                          |           |                          | 10        |                          |           |                          |           |                          |
|     |                   | B.        |                          |           |                          |           |                          | 10        |                          |           |                          |           |                          |
|     |                   | C.        |                          |           |                          |           |                          |           |                          |           |                          |           |                          |
|     |                   | D.        |                          |           |                          |           |                          |           |                          |           |                          |           |                          |
|     | Q.No.6            | A.        |                          |           |                          |           |                          | 10        | 9                        |           |                          |           |                          |
|     |                   | B.        |                          |           |                          |           |                          | 10        | 9                        |           |                          |           |                          |
|     |                   | C.        |                          |           |                          |           |                          |           |                          |           |                          |           |                          |
|     |                   | D.        |                          |           |                          |           |                          |           |                          |           |                          |           |                          |
|     | UNIT-IV           |           |                          |           |                          |           |                          |           |                          |           |                          |           |                          |
|     | Q.No.7            | A.        |                          |           |                          |           |                          |           |                          | 4         |                          |           |                          |
|     |                   | B.        |                          |           |                          |           |                          |           |                          | 10        |                          |           |                          |
|     |                   | C.        |                          |           |                          |           |                          |           |                          | 6         |                          |           |                          |
|     |                   | D.        |                          |           |                          |           |                          |           |                          |           |                          |           |                          |
|     | Q.No.8            | A.        |                          |           |                          |           |                          |           |                          | 20        | 15                       |           |                          |
|     |                   | B.        |                          |           |                          |           |                          |           |                          |           |                          |           |                          |
|     |                   | C.        |                          |           |                          |           |                          |           |                          |           |                          |           |                          |
|     |                   | D.        |                          |           |                          |           |                          |           |                          |           |                          |           |                          |
|     | Marks for COs     |           | 12                       | 10        | 28                       | 22        | 28                       | 13        | 52                       | 18        | 40                       | 15        | 0                        |
|     | Attainment (%)    |           | 83.33                    |           | 78.57                    |           | 46.43                    |           | 34.62                    |           | 37.50                    |           | 0.00                     |
|     | Attainment Levels |           | 3                        |           | 3                        |           | 2                        |           | 1                        |           | 1                        |           | 1                        |

#### Measuring Course Outcomes attained through Continuous Internal Examinations (CIE)

The procedure used to calculate CO attainment percentage and hence the levels is as below:

**Step-1:** COs are mapped on respective SEE question papers.

**Step-2:** The total marks are assigned to each CO is calculated including assignment marks.

**Step-3:** The total marks scored by student against each CO is calculated.

**Step- 4:** The CO attainment percentage is calculated as below:

$$\text{Percentage Attainment of CO}_i = (\text{Marks scored by students for CO}_i / \text{Total marks assigned to CO}_i) \times 100$$

Where, i = 1, 2, 3.....number of COs

**Step- 5:** The following method has been adopted for Attainment Levels for Continuous Internal Evaluation (CIE).

- Attainment Level 3:  $\geq 60\%$
- Attainment Level 2:  $\geq 40\%$
- Attainment Level 1:  $< 40\%$

A sample evaluation of CO attainment with respect to CIE marks is given in the below table 3.2.

Table 3.2. Evaluation of CO attainment through CIE

| CIE                 | Questions |    | Marks<br>CO1 | Marks<br>scored<br>by<br>students | Marks<br>CO2 | Marks<br>scored<br>by<br>students | Marks<br>CO3 | Marks<br>scored<br>by<br>students | Marks<br>CO4 | Marks<br>scored<br>by<br>students | Marks<br>CO5 | Marks<br>scored<br>by<br>students | Marks<br>CO6 | Marks<br>scored<br>by<br>students |
|---------------------|-----------|----|--------------|-----------------------------------|--------------|-----------------------------------|--------------|-----------------------------------|--------------|-----------------------------------|--------------|-----------------------------------|--------------|-----------------------------------|
| 1                   | Q.No.1    | A. | 10           | 8                                 |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   |
|                     |           | B. | 5            | 5                                 |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   |
|                     |           | C. |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   |
|                     | Q.No.2    | A. | 10           |                                   |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   |
|                     |           | B. |              |                                   | 5            |                                   |              |                                   |              |                                   |              |                                   |              |                                   |
|                     |           | C. |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   |
|                     | Q.No.3    | A. |              |                                   | 5            | 3                                 |              |                                   |              |                                   |              |                                   |              |                                   |
|                     |           | B. |              |                                   | 5            | 4                                 |              |                                   |              |                                   |              |                                   |              |                                   |
|                     | C.        |    |              | 5                                 | 5            |                                   |              |                                   |              |                                   |              |                                   |              |                                   |
| 2                   | Q.No.1    | A. |              |                                   |              |                                   | 6            | 5                                 |              |                                   |              |                                   |              |                                   |
|                     |           | B. |              |                                   |              |                                   | 4            | 2                                 |              |                                   |              |                                   |              |                                   |
|                     |           | C. |              |                                   |              |                                   | 5            | 4                                 |              |                                   |              |                                   |              |                                   |
|                     | Q.No.2    | A. |              |                                   |              |                                   |              |                                   | 10           | 9                                 |              |                                   |              |                                   |
|                     |           | B. |              |                                   |              |                                   | 5            | 4                                 |              |                                   |              |                                   |              |                                   |
|                     |           | C. |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   |
|                     | Q.No.3    | A. |              |                                   |              |                                   |              |                                   | 10           |                                   |              |                                   |              |                                   |
|                     |           | B. |              |                                   |              |                                   |              |                                   | 5            |                                   |              |                                   |              |                                   |
|                     | C.        |    |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   |
| 3                   | Q.No.1    | A. |              |                                   |              |                                   |              |                                   |              |                                   | 10           | 7                                 |              |                                   |
|                     |           | B. |              |                                   |              |                                   |              |                                   |              |                                   | 5            | 4                                 |              |                                   |
|                     |           | C. |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   |
|                     | Q.No.2    | A. |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   | 10           |                                   |
|                     |           | B. |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   | 5            |                                   |
|                     |           | C. |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   |
|                     | Q.No.3    | A. |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   | 5            | 4                                 |
|                     |           | B. |              |                                   |              |                                   |              |                                   |              |                                   |              |                                   | 5            | 3                                 |
|                     | C.        |    |              |                                   |              |                                   |              |                                   |              |                                   |              | 5                                 | 4            |                                   |
| Assignment(Marks 5) |           |    | 1            | 1                                 | 1            | 1                                 | 1            | 1                                 | 1            | 1                                 | 1            | 1                                 |              |                                   |
| Marks for COs       |           |    | 26           | 14                                | 21           | 13                                | 21           | 16                                | 26           | 10                                | 16           | 12                                | 30           | 11                                |
| Attainment (%)      |           |    | 53.85        |                                   | 0.62         |                                   | 0.76         |                                   | 0.38         |                                   | 0.75         |                                   | 0.37         |                                   |
| Attainment Levels   |           |    | 2            |                                   | 3            |                                   | 3            |                                   | 1            |                                   | 3            |                                   | 1            |                                   |

Target and Attainment of all course COs using Continuous Internal Evaluation (CIE) is as shown in table 3.1.

CO - Course Outcome    TGT - Target    ATM - Attainment

Table 3.1. Target and Attainment of COs using Continuous Internal Evaluation (CIE)

| Continuous Internal Evaluation (CIE) |     |     |     |     |     |     |     |     |     |      |     |     |  |
|--------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|--|
| Course Code                          | CO1 |     | CO2 |     | CO3 |     | CO4 |     | CO5 |      | CO6 |     |  |
|                                      | TGT | ATM | TGT | ATM | TGT | ATM | TGT | ATM | TGT | ATM  | TGT | ATM |  |
| Semester 3                           |     |     |     |     |     |     |     |     |     |      |     |     |  |
| C201.1                               | 40  | 64  | 40  | 30  | 40  | 30  | 40  | 00  | 40  | 42.5 | 40  | 34  |  |

|                   |    |       |    |       |    |       |    |       |    |       |    |       |
|-------------------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|
| C201.2            | 40 | 37.50 | 40 | 20.5  | 40 | 54    | 40 | 46    | -- | --    | -- | --    |
| C201.3            | 50 | 88    | 50 | 51.5  | 50 | 41    | 50 | 89    | 50 | 00    | -- | --    |
| C201.4            | 40 | 36    | 40 | 36    | 40 | 43    | 40 | 35    | 40 | 25    | 40 | 48    |
| C201.5            | 40 | 38.5  | 40 | 36    | 40 | 73.5  | 40 | 71.5  | 40 | 57    | -- | --    |
| C201.6            | 70 | 75.67 | 70 | 75.63 | -- | --    | -- | --    | -- | --    | -- | --    |
| C201.7            | 70 | 90.99 | 70 | 90.99 | 70 | 90.99 | 70 | 90.99 | -- | --    | -- | --    |
| C201.8            | 70 | 85.80 | 70 | 85.80 | 70 | 85.80 | 70 | 85.80 | -- | --    | -- | --    |
| <b>Semester 4</b> |    |       |    |       |    |       |    |       |    |       |    |       |
| C202.1            | 40 | 43.5  | 40 | 41.5  | 40 | 83.5  | 40 | 67    | 40 | 50.5  | -- | --    |
| C202.2            | 40 | 43    | 40 | 25.5  | 40 | 35.5  | 40 | 66    | 40 | 65.5  | -- | --    |
| C202.3            | 50 | 78.5  | 50 | 46    | 50 | 72    | 50 | 55    | 50 | 55.5  | -- | --    |
| C202.4            | 40 | 42    | 40 | 46.5  | 40 | 51.2  | 40 | 57.2  | 40 | 65    | -- | --    |
| C202.5            | 60 | 50    | 50 | 42.5  | 40 | 33    | 50 | 43.5  | 40 | 40.5  | -- | --    |
| C202.6            | 70 | 90.13 | 70 | 90.13 | 70 | 90.13 | -- | --    | -- | --    | -- | --    |
| C202.7            | 70 | 83.87 | 70 | 83.87 | 70 | 83.87 | 70 | 83.87 | -- | --    | -- | --    |
| C202.8            | 50 | 55.8  | 50 | 67.2  | 50 | 64.5  | -- | --    | -- | --    | -- | --    |
| <b>Semester 5</b> |    |       |    |       |    |       |    |       |    |       |    |       |
| C301.1            | 50 | 39    | 50 | 49.5  | 50 | 49.5  | 50 | 58.5  | 50 | 44    | 50 | 58    |
| C301.2            | 50 | 61.2  | 50 | 63    | 50 | 66.5  | 50 | 67    | 50 | 66    |    |       |
| C301.3            | 50 | 45    | 50 | 36    | 50 | 45    | 40 | 36    | 45 | 52    | -- | --    |
| C301.4            | 50 | 79    | 50 | 35    | 50 | 34.5  | 50 | 45.5  | 50 | 37    | -- | --    |
| C301.5            | 20 | 53.5  | 40 | 40.5  | 40 | 36    | 40 | 51.5  | -- | --    | -- | --    |
| C301.6            | 30 | 38    | 50 | 62.5  | 50 | 40.5  | 20 | 15.5  | 20 | 20    | -- | --    |
| C301.7            | 70 | 87.34 | 70 | 87.34 | 70 | 87.34 | 70 | 87.34 | -- | --    | -- | --    |
| C301.8            | 70 | 86.41 | 70 | 86.41 | 70 | 86.41 | 70 | 86.41 | -- | --    | -- | --    |
| C301.9            | 50 | 55.8  | 50 | 67.2  | 50 | 64.5  | -- | --    | -- | --    | -- | --    |
| <b>Semester 6</b> |    |       |    |       |    |       |    |       |    |       |    |       |
| C302.1            | 50 | 50.5  | 60 | 58.5  | 50 | 55    | 70 | 71    | 70 | 77    | -- | --    |
| C302.2            | 40 | 98    | 40 | 38    | 40 | 87    | 40 | 61.5  | 40 | 57    | 40 | 48    |
| C302.3            | 40 | 71.5  | 40 | 27.5  | 40 | 58    | 40 | 58.5  | 40 | 64.5  | 40 | 46    |
| C302.4            | 50 | 47.5  | 50 | 75.5  | 50 | 54    | 50 | 62    | -- | --    | -- | --    |
| C302.5            | 50 | 51    | 50 | 53.5  | 50 | 42.5  | 50 | 80    | -- | --    | -- | --    |
| C302.6            | 70 | 91.68 | 70 | 91.68 | 70 | 91.68 | 70 | 91.68 | -- | --    | -- | --    |
| C302.7            | 70 | 87.76 | 70 | 87.76 | 70 | 87.76 | 70 | 87.76 | -- | --    | -- | --    |
| C302.8            | 50 | 62.5  | 50 | 67.43 | 50 | 62    | -- | --    | -- | --    | -- | --    |
| C302.9            | 70 | 90.23 | 70 | 90.23 | 70 | 90.23 | 70 | 90.23 | 70 | 90.23 | 70 | 90.23 |



|                   |    |       |    |       |    |       |    |       |    |       |    |       |
|-------------------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|
| C302.10           | 50 | 49    | 50 | 22    | 50 | 91.5  | 50 | 59    | -- | --    | -- | --    |
| <b>Semester 7</b> |    |       |    |       |    |       |    |       |    |       |    |       |
| C401.1            | 40 | 74.5  | 40 | 46.5  | 40 | 58    | 40 | 53    | 40 | 00    | -- | --    |
| C401.2            | 40 | 64.5  | 40 | 68    | 40 | 58.5  | 40 | 49    | 40 | 74.5  | 40 | 76    |
| C401.3            | 40 | 74.5  | 40 | 37.5  | 40 | 85.5  | 40 | 47    | 40 | 67.5  | 40 | 83.5  |
| C401.4            | 50 | 50    | 50 | 28.5  | 50 | 60.5  | 50 | 46    | 50 | 65.5  | -- | --    |
| C401.5            | 40 | 46    | 40 | 56.5  | 40 | 29.5  | 40 | 64.5  | 40 | 58    | 40 | 31.5  |
| C401.6            | 70 | 86.53 | 70 | 86.53 | 70 | 86.53 | -- | --    | -- | --    | -- | --    |
| C401.7            | 70 | 72.56 | 70 | 72.56 | 70 | 72.56 | 70 | 72.56 | 70 | 72.56 | 70 | 72.56 |
| C401.8            | 70 | 92.02 | 70 | 92.02 | 70 | 92.02 | -- | --    | -- | --    | -- | --    |
| C401.9            | 70 | 90.89 | 70 | 90.89 | 70 | 90.89 | 70 | 90.89 | -- | --    | -- | --    |
| C401.10           | 40 | 88.5  | 40 | 39.5  | 40 | 46.5  | 40 | 40.5  | 40 | 51    | -- | --    |
| <b>Semester 8</b> |    |       |    |       |    |       |    |       |    |       |    |       |
| C402.1            | 70 | 89.70 | 70 | 89.70 | 70 | 89.70 | 70 | 89.70 | -- | --    | -- | --    |
| C402.2            | 50 | 63    | 50 | 18    | 50 | 46    | 50 | 78.5  | 50 | 74.5  | 50 | 49.5  |
| C402.3            | 40 | 79    | 40 | 40.5  | 40 | 75.5  | 40 | 52.5  | 40 | 64.5  | 40 | 88.5  |
| C402.4            | 40 | 45    | 40 | 31    | 40 | 69.5  | 40 | 54.5  | 40 | 63    | -- | --    |
| C402.5            | 70 | 87.60 | 70 | 87.60 | 70 | 87.60 | 70 | 87.60 | -- | --    | -- | --    |

Target and Attainment of all course COs using Semester End Examination (SEE) is as shown in table 3.2.

Table 3.2. Target and Attainment of COs using Semester End Examination (SEE)

| <b>Semester End Examination (SEE)</b> |            |            |            |            |            |            |            |            |            |            |            |            |
|---------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| <b>Course Code</b>                    | <b>CO1</b> |            | <b>CO2</b> |            | <b>CO3</b> |            | <b>CO4</b> |            | <b>CO5</b> |            | <b>CO6</b> |            |
|                                       | <b>TGT</b> | <b>ATM</b> | <b>TGT</b> | <b>ATM</b> | <b>TGT</b> | <b>ATM</b> | <b>TGT</b> | <b>ATM</b> | <b>TGT</b> | <b>ATM</b> | <b>TGT</b> | <b>ATM</b> |
| <b>Semester 3</b>                     |            |            |            |            |            |            |            |            |            |            |            |            |
| C201.1                                | 40         | 43         | 40         | 23         | 40         | 30         | 40         | 10         | 40         | 40         | 40         | 48         |
| C201.2                                | 40         | 45         | 40         | 22         | 40         | 65         | 40         | 51         | --         | --         | --         | --         |
| C201.3                                | 50         | 70         | 50         | 53         | 50         | 46         | 50         | 23         | 50         | 34         | --         | --         |
| C201.4                                | 40         | 34         | 40         | 23         | 40         | 62.5       | 40         | 27.5       | 40         | 43.5       | 40         | 59         |
| C201.5                                | 40         | 32         | 40         | 31         | 40         | 65         | 40         | 50         | 40         | 48         | --         | --         |
| <b>Semester 4</b>                     |            |            |            |            |            |            |            |            |            |            |            |            |
| C202.1                                | 50         | 61         | 50         | 42         | 50         | 73         | 50         | 35         | 50         | 41         | 50         | 46         |
| C202.2                                | 40         | 31         | 40         | 30         | 40         | 60         | 40         | 39         | --         | --         | --         | --         |
| C202.3                                | 50         | 52         | 50         | 51         | 50         | 35         | 50         | 88         | 50         | 00         | --         | --         |
| C202.4                                | 40         | 42         | 40         | 46         | 40         | 36         | 40         | 41.5       | 40         | 65         | --         | --         |
| C202.5                                | 60         | 72         | 50         | 54         | 40         | 38         | 50         | 33         | 45         | 35         | --         | --         |
| C202.8                                | 40         | 36.8       | 40         | 55.2       | 40         | 61         | --         | --         | --         | --         | --         | --         |

| Semester 5 |                          |      |    |       |    |       |    |       |    |      |    |      |
|------------|--------------------------|------|----|-------|----|-------|----|-------|----|------|----|------|
| C301.1     | 50                       | 55.5 | 40 | 49.75 | 40 | 40.75 | 40 | 45.25 | 40 | 55.5 | 40 | 55.5 |
| C301.2     | 40                       | 60.5 | 40 | 55.2  | 40 | 53.8  | 40 | 42    | 40 | 43   | -- | --   |
| C301.3     | 50                       | 59   | 50 | 63    | 50 | 55    | 40 | 38    | 45 | 39   | -- | --   |
| C301.4     | 50                       | 58   | 50 | 64    | 50 | 47    | 50 | 18    | 50 | 16   | -- | --   |
| C301.5     | 20                       | 00   | 40 | 58    | 40 | 45    | 40 | 49    | -- | --   | -- | --   |
| C301.6     | 30                       | 58   | 50 | 46    | 50 | 59    | 20 | 30    | 20 | 00   | -- | --   |
| C301.9     | 40                       | 32.6 | 40 | 42.6  | 40 | 46.8  | -- | --    | -- | --   | -- | --   |
| Semester 6 |                          |      |    |       |    |       |    |       |    |      |    |      |
| C302.1     | Promoted due to pandemic |      |    |       |    |       |    |       |    |      |    |      |
| C302.2     | Promoted due to pandemic |      |    |       |    |       |    |       |    |      |    |      |
| C302.3     | Promoted due to pandemic |      |    |       |    |       |    |       |    |      |    |      |
| C302.4     | Promoted due to pandemic |      |    |       |    |       |    |       |    |      |    |      |
| C302.5     | Promoted due to pandemic |      |    |       |    |       |    |       |    |      |    |      |
| C302.8     | Promoted due to pandemic |      |    |       |    |       |    |       |    |      |    |      |
| C302.9     | Promoted due to pandemic |      |    |       |    |       |    |       |    |      |    |      |
| C302.10    | Promoted due to pandemic |      |    |       |    |       |    |       |    |      |    |      |
| Semester 7 |                          |      |    |       |    |       |    |       |    |      |    |      |
| C401.1     | 40                       | 58   | 40 | 48    | 40 | 26    | 40 | 42    | 40 | 29   | -- | --   |
| C401.2     | 40                       | 32   | 40 | 48    | 40 | 50    | 40 | 24    | 40 | 61   | 40 | 61   |
| C401.3     | 40                       | 74   | 40 | 64    | 40 | 46    | 40 | 18    | 40 | 43   | 40 | 54   |
| C401.4     | 40                       | 44   | 40 | 23    | 40 | 16    | 40 | 53    | 40 | 56   | -- | --   |
| C401.5     | 50                       | 61   | 50 | 58    | 50 | 30    | 50 | 40    | 50 | 28   | 50 | 63   |
| C401.10    | 40                       | 72   | 40 | 63    | 40 | 12    | 40 | 13    | 40 | 44   | -- | --   |
| Semester 8 |                          |      |    |       |    |       |    |       |    |      |    |      |
| C402.2     | 40                       | 73   | 40 | 61    | 40 | 14    | 40 | 17    | 40 | 23   | 40 | 50   |
| C402.3     | 40                       | 63   | 40 | 67    | 40 | 14    | 40 | 41    | 40 | 42   | 40 | 51   |
| C402.4     | 40                       | 66   | 40 | 42    | 40 | 33    | 40 | 16    | 40 | 36   | -- | --   |

Course Outcomes Attainment Levels for CIE and SEE are shown in below table 3.3.

Table 3.3. Course outcome attainment levels

| Course Code | Attainment of COs - CIE |     |     |     |     |     | Attainment of Cos - SEE |     |     |     |     |     | Average Attainment Levels |     |     |     |     |     |
|-------------|-------------------------|-----|-----|-----|-----|-----|-------------------------|-----|-----|-----|-----|-----|---------------------------|-----|-----|-----|-----|-----|
|             | CO1                     | CO2 | CO3 | CO4 | CO5 | CO6 | CO1                     | CO2 | CO3 | CO4 | CO5 | CO6 | CO1                       | CO2 | CO3 | CO4 | CO5 | CO6 |
| C201.1      | 3                       | 1   | 1   | 0   | 2   | 1   | 2                       | 1   | 1   | 1   | 2   | 2   | 2.5                       | 1   | 1   | 0.5 | 2   | 1.5 |
| C201.2      | 1                       | 1   | 2   | 2   | 0   | 0   | 2                       | 1   | 3   | 2   | 0   | 0   | 1.5                       | 1   | 2.5 | 2   | 0   | 0   |
| C201.3      | 3                       | 2   | 2   | 3   | 0   | 0   | 3                       | 2   | 2   | 1   | 1   | 0   | 3                         | 2   | 2   | 2   | 0.5 | 0   |
| C201.4      | 1                       | 1   | 2   | 1   | 1   | 2   | 1                       | 1   | 3   | 1   | 2   | 2   | 1                         | 1   | 2.5 | 1   | 1.5 | 2   |
| C201.5      | 1                       | 1   | 3   | 3   | 2   | 0   | 1                       | 1   | 3   | 2   | 2   | 0   | 1                         | 1   | 3   | 2.5 | 2   | 0   |

|         |   |   |   |   |   |   |   |   |   |   |   |   |     |     |     |     |     |     |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|-----|-----|-----|-----|-----|-----|
| C201.6  | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 1.5 | 0   | 0   | 0   | 0   |
| C201.7  | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 1.5 | 1.5 | 1.5 | 0   | 0   |
| C201.8  | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 1.5 | 1.5 | 1.5 | 0   | 0   |
| C202.1  | 2 | 2 | 3 | 3 | 2 | 0 | 3 | 2 | 3 | 1 | 2 | 2 | 2.5 | 2   | 3   | 2   | 2   | 1   |
| C202.2  | 2 | 1 | 1 | 3 | 3 | 0 | 1 | 1 | 3 | 1 | 0 | 0 | 1.5 | 1   | 2   | 2   | 1.5 | 0   |
| C202.3  | 3 | 2 | 3 | 2 | 2 | 0 | 2 | 2 | 1 | 3 | 0 | 0 | 2.5 | 2   | 2   | 2.5 | 1   | 0   |
| C202.4  | 2 | 2 | 2 | 2 | 3 | 0 | 2 | 2 | 1 | 2 | 3 | 0 | 2   | 2   | 1.5 | 2   | 3   | 0   |
| C202.5  | 2 | 2 | 1 | 2 | 2 | 0 | 3 | 2 | 1 | 1 | 1 | 0 | 2.5 | 2   | 1   | 1.5 | 1.5 | 0   |
| C202.6  | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 1.5 | 1.5 | 0   | 0   | 0   |
| C202.7  | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 1.5 | 1.5 | 1.5 | 0   | 0   |
| C202.8  | 2 | 3 | 3 | 0 | 0 | 0 | 1 | 2 | 3 | 0 | 0 | 0 | 1.5 | 2.5 | 3   | 0   | 0   | 0   |
| C301.1  | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1.5 | 2   | 2   | 2   | 2   | 2   |
| C301.2  | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 2 | 2 | 2 | 2 | 0 | 3   | 2.5 | 2.5 | 2.5 | 2.5 | 0   |
| C301.3  | 2 | 1 | 2 | 1 | 2 | 0 | 2 | 3 | 2 | 1 | 1 | 0 | 2   | 2   | 2   | 1   | 1.5 | 0   |
| C301.4  | 3 | 1 | 1 | 2 | 1 | 0 | 2 | 3 | 2 | 1 | 1 | 0 | 2.5 | 2   | 1.5 | 1.5 | 1   | 0   |
| C301.5  | 2 | 2 | 1 | 2 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 1   | 2   | 1.5 | 2   | 0   | 0   |
| C301.6  | 1 | 3 | 2 | 1 | 1 | 0 | 2 | 2 | 2 | 1 | 0 | 0 | 1.5 | 2.5 | 2   | 1   | 0.5 | 0   |
| C301.7  | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 1.5 | 1.5 | 1.5 | 0   | 0   |
| C301.8  | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 1.5 | 1.5 | 1.5 | 0   | 0   |
| C301.9  | 2 | 3 | 3 | 0 | 0 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 1.5 | 2.5 | 2.5 | 0   | 0   | 0   |
| C302.1  | 2 | 2 | 2 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2   | 2   | 2   | 3   | 3   | 0   |
| C302.2  | 3 | 1 | 3 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3   | 1   | 3   | 3   | 2   | 2   |
| C302.3  | 3 | 1 | 2 | 2 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3   | 1   | 2   | 2   | 3   | 2   |
| C302.4  | 2 | 3 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2   | 3   | 2   | 3   | 0   | 0   |
| C302.5  | 2 | 2 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2   | 2   | 2   | 3   | 0   | 0   |
| C302.6  | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3   | 3   | 3   | 3   | 0   | 0   |
| C302.7  | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3   | 3   | 3   | 3   | 0   | 0   |
| C302.8  | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3   | 3   | 3   | 0   | 0   | 0   |
| C302.9  | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3   | 3   | 3   | 3   | 3   | 3   |
| C302.10 | 2 | 1 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2   | 1   | 3   | 2   | 0   | 0   |
| C401.1  | 3 | 2 | 2 | 2 | 0 | 0 | 2 | 2 | 1 | 2 | 1 | 0 | 2.5 | 2   | 1.5 | 2   | 0.5 | 0   |
| C401.2  | 3 | 3 | 2 | 2 | 3 | 3 | 1 | 2 | 2 | 1 | 3 | 3 | 2   | 2.5 | 2   | 1.5 | 3   | 3   |
| C401.3  | 3 | 1 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 3   | 2   | 2.5 | 1.5 | 2.5 | 2.5 |
| C401.4  | 2 | 1 | 3 | 2 | 3 | 0 | 2 | 1 | 1 | 2 | 2 | 0 | 2   | 1   | 2   | 2   | 2.5 | 0   |
| C401.5  | 2 | 2 | 1 | 3 | 2 | 1 | 3 | 2 | 1 | 2 | 1 | 3 | 2.5 | 2   | 1   | 2.5 | 1.5 | 2   |
| C401.6  | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 1.5 | 1.5 | 0   | 0   | 0   |
| C401.7  | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| C401.8  | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 1.5 | 1.5 | 0   | 0   | 0   |
| C401.9  | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 1.5 | 1.5 | 1.5 | 0   | 0   |
| C401.10 | 3 | 1 | 2 | 2 | 2 | 0 | 3 | 3 | 1 | 1 | 2 | 0 | 3   | 2   | 1.5 | 1.5 | 2   | 0   |
| C402.1  | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 1.5 | 1.5 | 1.5 | 0   | 0   |
| C402.2  | 3 | 1 | 2 | 3 | 3 | 2 | 3 | 3 | 1 | 1 | 1 | 2 | 3   | 2   | 1.5 | 2   | 2   | 2   |
| C402.3  | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 1 | 2 | 2 | 2 | 3   | 2.5 | 2   | 2   | 2.5 | 2.5 |
| C402.4  | 2 | 1 | 3 | 2 | 3 | 0 | 3 | 2 | 1 | 1 | 1 | 0 | 2.5 | 1.5 | 2   | 1.5 | 2   | 0   |
| C402.5  | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.5 | 1.5 | 1.5 | 1.5 | 0   | 0   |

Sample copy of CO attainment for the course is as shown below:

| CO Attainment (2017-21 batch)                            |   |                             |                        |                          |
|----------------------------------------------------------|---|-----------------------------|------------------------|--------------------------|
| NBA Course Code                                          | : | C401.4                      |                        | Attainment Levels:       |
| Course Code                                              | : | UIS068E                     |                        | >=60 : Level 3           |
| Course Name                                              | : | Software Project Management |                        | >=40 : Level 2           |
| Semester                                                 | : | 7                           |                        | <40 : Level 1            |
| Academic Year                                            | : | 2020-21                     |                        |                          |
| Attainment Through Continuous Internal Examinations(CIE) |   |                             |                        |                          |
| Course Outcomes:                                         |   | Target (%)                  | Attainment (%)         | Attainment Level         |
| CO1                                                      | : | 50                          | 50                     | 2                        |
| CO2                                                      | : | 50                          | 28.5                   | 1                        |
| CO3                                                      | : | 50                          | 60.5                   | 3                        |
| CO4                                                      | : | 50                          | 46                     | 2                        |
| CO5                                                      |   | 50                          | 65.5                   | 3                        |
| Attainment Through Semester End Examinations(SEE)        |   |                             |                        |                          |
| Course Outcomes:                                         |   | Target (%)                  | Attainment (%)         | Attainment Level         |
| CO1                                                      | : | 40                          | 44                     | 2                        |
| CO2                                                      | : | 40                          | 23                     | 1                        |
| CO3                                                      | : | 40                          | 16                     | 1                        |
| CO4                                                      | : | 40                          | 53                     | 2                        |
| CO5                                                      |   | 40                          | 56                     | 2                        |
| Total Attainment (50% CIE + 50% SEE)                     |   |                             |                        |                          |
| Course Outcomes:                                         |   | Average Target (%)          | Average Attainment (%) | Average Attainment Level |
| CO1                                                      | : | 45                          | 47                     | 2                        |
| CO2                                                      | : | 45                          | 25.75                  | 1                        |
| CO3                                                      | : | 45                          | 38.25                  | 1                        |
| CO4                                                      | : | 45                          | 49.5                   | 2                        |
| CO5                                                      |   | 45                          | 60.75                  | 3                        |

### 3.3 Attainment of Program Outcomes and Program Specific Outcomes (75)

Total Marks 75.00

#### 3.3.1 Describe assessment tools and processes used for measuring the attainment of each Program Outcome and Program Specific Outcomes (10)

Institute Marks : 10.00

The PO and PSO attainment level for all the courses for 2018-19, 2019-20 and 2020-21 are carried out.

The expected level of attainment of each PO and PSO with course outcomes (CO) is given in section 3.3.2. The correlation which is qualitative in nature is further quantified into score by assigning weightage 3, 2 and 1. The level of attainment for individual PO and PSO is arrived at by taking a ratio of number of points to be scored for the individual PO and PSO to the total number of points to be scored in that course.

Attainment of POs and PSOs is based on the performance of individual student in various assessment tools used such as CIE, Assignments, Quizzes, Laboratories, Seminars, Projects. Each student gets an appropriate grade at the end of the semester which is a cumulative result of various assessment methods used. Hence the grades obtained by the students are considered for deciding the attainment of POs and PSOs. Considering the sum of grade points obtained by all the students in each course (subject) is calculated and compared with the most ideal situation of all students obtaining "S" grade(outstanding grade) and the ratio is depicted. This gives basis for the attainment of each PO and PSOs. The attainment level of POs and PSOs is used for curriculum revision. The attainment level of each POs and PSOs for a particular batch of the programme is given in the table for the academic year 2018-19, 2019-20 and 2020-21.

The achievement level of each PO and PSO is calculated by the ratio of set values for all subjects in an academic year to the obtained value using the results of the students in SEE for all subjects in the same academic year.

The weightage 3, 2 and 1 represent high, medium and low correlation respectively. The high, medium and low correlation 3,2 and 1 are represented with the weightage of 4, 2and 1 respectively. The total summation of all 3, 2 and 1 for each subject is calculated. The set value of PO<sub>i</sub> and PSO<sub>i</sub> for a particular subject is given by

$$PO_{Si} = \frac{\sum_{i=1}^{12} (No.of3) \times 3 + (No.of2) \times 2 + (No.of1) \times 1}{\sum_{i=1}^{12} (No.of3_i) \times 3 + (No.of2_i) \times 2 + (No.of1_i) \times 1} \quad \text{Eq. 1}$$

$$PSO_{Si} = \frac{\sum_{i=1}^4 (No.of3) \times 3 + (No.of2) \times 2 + (No.of1) \times 1}{\sum_{i=1}^4 (No.of3_i) \times 3 + (No.of2_i) \times 2 + (No.of1_i) \times 1} \quad \text{Eq. 2}$$

The obtained value for each subject is calculated from the SEE results of students in that particular subject. The grades assigned for the students are S, A, B, C, D, E and F (10, 9, 8, 7, 5, 4 and 0). The multiplication factor to calculate achievement of PO<sub>i</sub> and PSO<sub>i</sub> is

$$\text{Multiplication Factor} = \frac{\text{Actual points obtained in a subject for all students}}{\text{Maximum points that can be obtained in a subject for all students}} \quad \text{Eq. 3}$$

$$\begin{aligned} & (no.ofstudentsin\ Sgrade) \times 10 + (No.ofstudentsin\ Agrade) \times 9 + \\ & \sum (No.ofstudentsin\ Bgrade) \times 8 + (No.ofstudentsin\ Cgrade) \times 7 + \\ & (No.ofstudentsin\ Dgrade) \times 5 + (No.ofstudentsin\ Egrade) \times 4 + \\ & (No.ofstudentsin\ Fgrade) \times 0 \\ & = \frac{\quad}{S(10) \times No.ofStudents} \end{aligned} \quad \text{Eq. 4}$$

The multiplication factor obtained from equation (4) is multiplied with the set value of PO<sub>i</sub> and PSO<sub>i</sub>, to obtain attainment value for a particular subject. The same procedure is repeated to obtain attainment values of PO<sub>i</sub> and PSO<sub>i</sub> of all subjects. The achievement level of PO<sub>ai</sub> is calculated as the ratio of summation of obtained PO<sub>i</sub> values to summation of set PO<sub>si</sub> values for all subjects in an academic year as per equation (5).

$$PO_{ai} = \frac{\sum_{j=1}^n PO_{oi}}{\sum_{j=1}^n PO_{si}} \quad \text{Eq. 5}$$

Where j= 1 to n, where n=number of subjects

The following method has been adopted for Attainment Levels for POs.

- Attainment Level 3: >=60%
- Attainment Level 2: >=40%
- Attainment Level 1: <40%

### 3.3.2 Provide results of evaluation of each PO & PSO (65)

Institute Marks : 65.00

#### PO Attainment

| Course | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| C201.1 | 2   | 2   | 2   | 2   | 0   | 0   | 0   | 0   | 0   | 0    | 0    | 2    |

|         |   |   |   |   |   |   |   |   |   |   |   |   |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|
| C201.2  | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C201.3  | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| C201.4  | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 |
| C201.5  | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 0 | 2 | 2 | 2 | 2 |
| C201.6  | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| C201.7  | 3 | 3 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| C201.8  | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| C202.1  | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 0 | 3 | 3 |
| C202.2  | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C202.3  | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| C202.4  | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| C202.5  | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| C202.6  | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| C202.7  | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| C301.1  | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 0 | 3 | 3 | 3 | 3 |
| C301.2  | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| C301.3  | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| C301.4  | 2 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| C301.5  | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| C301.6  | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| C301.7  | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| C301.8  | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| C302.1  | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| C302.2  | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 3 | 3 | 3 |
| C302.3  | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 3 | 0 | 3 | 3 |
| C302.4  | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| C302.5  | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 3 | 3 | 3 |
| C302.6  | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| C302.7  | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 3 | 3 | 3 |
| C302.9  | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| C302.10 | 3 | 3 | 3 | 0 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 3 |

|         |   |   |   |   |   |   |   |   |   |   |   |   |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|
| C401.1  | 0 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| C401.2  | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 3 | 0 | 3 |
| C401.3  | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 |
| C401.4  | 3 | 3 | 2 | 3 | 3 | 3 | 0 | 3 | 3 | 3 | 3 | 3 |
| C401.5  | 3 | 3 | 3 | 3 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| C401.6  | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 3 | 3 | 3 |
| C401.7  | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 3 | 3 | 0 | 3 |
| C401.8  | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C401.9  | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| C401.10 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 3 | 0 | 3 |
| C402.1  | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| C402.2  | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| C402.3  | 3 | 3 | 3 | 3 | 3 | 0 | 3 | 3 | 0 | 0 | 0 | 3 |
| C402.4  | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 3 |
| C402.5  | 3 | 3 | 0 | 3 | 3 | 3 | 0 | 3 | 3 | 3 | 0 | 3 |
| C202.8  | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| C301.9  | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| C302.8  | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |

## PO Attainment Indirect

| Course      | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| Parent Fee  | 1   | 1   | 1   | 2   | 1   | 1   | 1   | 1   | 1   | 1    | 1    | 1    |
| Alumni Fee  | 2   | 2   | 2   | 1   | 2   | 2   | 1   | 2   | 1   | 1    | 1    | 1    |
| Exit Survey | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3    | 3    | 3    |

## PO Attainment Level

| Course              | PO1  | PO2  | PO3  | PO4  | PO5 | PO6  | PO7  | PO8 | PO9  | PO10 | PO11 | PO12 |
|---------------------|------|------|------|------|-----|------|------|-----|------|------|------|------|
| InDirect Attainment | 2    | 2    | 2    | 2    | 2   | 2    | 1.67 | 2   | 1.67 | 1.67 | 1.67 | 1.67 |
| Direct Attainment   | 2.89 | 2.94 | 2.88 | 2.92 | 3   | 2.96 | 3    | 2.9 | 2.94 | 2.95 | 2.93 | 2.93 |

## PSO Attainment

| Course | PSO1 | PSO2 | PSO3 |
|--------|------|------|------|
| C201.1 | 2    | 2    | 2    |

|         |   |   |   |
|---------|---|---|---|
| C201.2  | 3 | 3 | 3 |
| C201.3  | 3 | 3 | 3 |
| C201.4  | 2 | 2 | 2 |
| C201.5  | 3 | 3 | 3 |
| C201.6  | 3 | 3 | 3 |
| C201.7  | 3 | 3 | 3 |
| C201.8  | 3 | 3 | 3 |
| C202.1  | 3 | 3 | 3 |
| C202.2  | 3 | 3 | 2 |
| C202.3  | 3 | 3 | 3 |
| C202.4  | 3 | 3 | 3 |
| C202.5  | 3 | 3 | 3 |
| C202.6  | 3 | 3 | 3 |
| C202.7  | 3 | 3 | 3 |
| C301.1  | 3 | 3 | 3 |
| C301.2  | 3 | 3 | 3 |
| C301.3  | 3 | 3 | 3 |
| C301.4  | 3 | 2 | 3 |
| C301.5  | 3 | 3 | 3 |
| C301.6  | 3 | 3 | 3 |
| C301.7  | 3 | 3 | 3 |
| C301.8  | 3 | 3 | 3 |
| C302.1  | 3 | 3 | 3 |
| C302.2  | 3 | 3 | 3 |
| C302.3  | 3 | 3 | 3 |
| C302.4  | 3 | 3 | 3 |
| C302.5  | 3 | 3 | 3 |
| C302.6  | 3 | 3 | 3 |
| C302.7  | 3 | 3 | 3 |
| C302.9  | 3 | 3 | 3 |
| C302.10 | 3 | 3 | 3 |
| C401.1  | 3 | 3 | 3 |



|         |   |   |   |
|---------|---|---|---|
| C401.2  | 3 | 3 | 3 |
| C401.3  | 3 | 3 | 3 |
| C401.4  | 3 | 3 | 3 |
| C401.5  | 3 | 3 | 3 |
| C401.6  | 3 | 3 | 0 |
| C401.7  | 3 | 3 | 3 |
| C401.8  | 3 | 3 | 3 |
| C401.9  | 3 | 3 | 3 |
| C401.10 | 3 | 3 | 3 |
| C402.1  | 3 | 3 | 3 |
| C402.2  | 3 | 3 | 3 |
| C402.3  | 3 | 3 | 3 |
| C402.4  | 3 | 3 | 3 |
| C402.5  | 3 | 3 | 3 |
| C202.8  | 0 | 3 | 3 |
| C301.9  | 0 | 3 | 3 |
| C302.8  | 0 | 3 | 3 |

## PSO Attainment Indirect

| Survey                 | PSO1 | PSO2 | PSO3 |
|------------------------|------|------|------|
| Parent Feedback Survey | 1    | 1    | 1    |
| Alumni Feedback Survey | 3    | 3    | 3    |
| Exit Survey            | 3    | 3    | 3    |

## PSO Attainment Level

| Course              | PSO1 | PSO2 | PSO3 |
|---------------------|------|------|------|
| Direct Attainment   | 2.96 | 2.94 | 2.94 |
| InDirect Attainment | 2.33 | 2.33 | 2.33 |

4 STUDENTS' PERFORMANCE (100)

Total Marks 86.52

Institute Marks :

Table 4.1

| Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)                                                        | 2021-22 (CAY) | 2020-21 (CAYm1) | 2019-20 (CAYm2) | 2018-19 (CAYm3) | 2017-18 (CAYm4) | 2016-17 (CAYm5) | 2015-16 (CAYm6) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Sanctioned intake of the program(N)                                                                                                                                  | 90            | 90              | 90              | 90              | 90              | 90              | 90              |
| Total number of students admitted in first year minus number of students migrated to other programs/ institutions plus No. of students migrated to this program (N1) | 90            | 78              | 81              | 90              | 80              | 90              | 89              |
| Number of students admitted in 2nd year in the same batch via lateral entry (N2)                                                                                     | 20            | 10              | 12              | 12              | 3               | 13              | 17              |
| Separate division students, If applicable (N3)                                                                                                                       | 0             | 0               | 0               | 0               | 0               | 0               | 0               |
| Total number of students admitted in the programme(N1 + N2 + N3)                                                                                                     | 110           | 88              | 93              | 102             | 83              | 103             | 106             |

Table 4.2

| Year of entry   | Total No of students admitted in the program (N1 + N2 + N3) | Number of students who have successfully graduated without backlogs in any semester/ year of study (Without Backlog means no compartment or failures in any semester/ year of study) |         |          |         |
|-----------------|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------|---------|
|                 |                                                             | I year                                                                                                                                                                               | II year | III year | IV year |
| 2021-22 (CAY)   | 110                                                         |                                                                                                                                                                                      |         |          |         |
| 2020-21 (CAYm1) | 88                                                          | 25                                                                                                                                                                                   |         |          |         |
| 2019-20 (CAYm2) | 93                                                          | 26                                                                                                                                                                                   | 26      |          |         |
| 2018-19 (CAYm3) | 102                                                         | 30                                                                                                                                                                                   | 30      | 29       |         |
| 2017-18 (LYG)   | 83                                                          | 24                                                                                                                                                                                   | 24      | 23       | 22      |
| 2016-17 (LYGm1) | 103                                                         | 27                                                                                                                                                                                   | 25      | 25       | 25      |
| 2015-16 (LYGm2) | 106                                                         | 25                                                                                                                                                                                   | 24      | 24       | 24      |

Table 4.3

| Year of entry   | Total No of students admitted in the program (N1 + N2 + N3) | Number of students who have successfully graduated in stipulated period of study) [Total of with Backlog + without Backlog] |         |          |         |
|-----------------|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------|----------|---------|
|                 |                                                             | I year                                                                                                                      | II year | III year | IV year |
| 2021-22 (CAY)   | 90                                                          |                                                                                                                             |         |          |         |
| 2020-21 (CAYm1) | 88                                                          | 78                                                                                                                          |         |          |         |
| 2019-20 (CAYm2) | 93                                                          | 81                                                                                                                          | 91      |          |         |
| 2018-19 (CAYm3) | 102                                                         | 78                                                                                                                          | 88      | 88       |         |
| 2017-18 (LYG)   | 83                                                          | 68                                                                                                                          | 68      | 67       | 62      |
| 2016-17 (LYGm1) | 103                                                         | 71                                                                                                                          | 79      | 77       | 74      |
| 2015-16 (LYGm2) | 106                                                         | 66                                                                                                                          | 76      | 76       | 71      |

**4.1 Enrolment Ratio (20)**

Total Marks 20.00

Institute Marks : 20.00

|                 | N (From Table 4.1) | N1 (From Table 4.1) | Enrollment Ratio [(N1/N)*100] |
|-----------------|--------------------|---------------------|-------------------------------|
| 2021-22 (CAY)   | 90                 | 90                  | 100.00                        |
| 2020-21 (CAYm1) | 90                 | 78                  | 86.67                         |
| 2019-20 (CAYm2) | 90                 | 81                  | 90.00                         |

Average [ (ER1 + ER2 + ER3) / 3 ] : 92.22

Assessment : 20.00

**4.2 Success Rate in the stipulated period of the program (20)**

Total Marks 7.32

**4.2.1 Success rate without backlogs in any semester / year of study (15)**

Institute Marks : 3.75

| Item                                                                                                                                            | Latest Year of Graduation, LYG (2017-18) | Latest Year of Graduation minus 1, LYGm1 (2016-17) | Latest Year of Graduation minus 2, LYGm2 (2015-16) |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------------------|----------------------------------------------------|
| X<br>Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable | 83.00                                    | 103.00                                             | 106.00                                             |
| Y<br>Number of students who have graduated without backlogs in the stipulated period                                                            | 22.00                                    | 25.00                                              | 24.00                                              |
| Success Index [ $SI = Y / X$ ]                                                                                                                  | 0.27                                     | 0.24                                               | 0.23                                               |

Average SI [ ( SI1 + SI2 + SI3) / 3 ] : 0.25

Assessment [15 \* Average SI] : 3.75

**4.2.2 Success rate in stipulated period (5)**

Institute Marks : 3.57

| Item                                                                                                                                            | Latest Year of Graduation, LYG (2017-18) | Latest Year of Graduation minus 1, LYGm1 (2016-17) | Latest Year of Graduation minus 2, LYGm2 (2015-16) |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------------------|----------------------------------------------------|
| X<br>Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable | 83.00                                    | 103.00                                             | 106.00                                             |
| Y<br>Number of students who have graduated in the stipulated period                                                                             | 62.00                                    | 74.00                                              | 71.00                                              |
| Success Index [ $SI = Y / X$ ]                                                                                                                  | 0.75                                     | 0.72                                               | 0.67                                               |

Average SI [ ( SI1 + SI2 + SI3) / 3 ] : 0.71

Assessment [5 \* Average SI] : 3.57

**Note** : If 100% students clear without any backlog then also total marks scored will be 20 as both 4.2.1 & 4.2.2 will be applicable simultaneously.**4.3 Academic Performance in Second Year (10)**

Total Marks 10.00

| Academic Performance                                          | CAYm2 ( 2019-20 ) | CAYm3 ( 2018-19 ) | LYG ( 2017-18 ) |
|---------------------------------------------------------------|-------------------|-------------------|-----------------|
| Mean of CGPA or mean percentage of all successful students(X) | 7.08              | 7.04              | 7.36            |
| Total number of successful students (Y)                       | 91.00             | 88.00             | 68.00           |
| Total number of students appeared in the examination (Z)      | 93.00             | 90.00             | 71.00           |
| API [ X * (Y/Z) ]                                             | 6.93              | 6.88              | 7.05            |

Average API [ (AP1 + AP2 + AP3)/3 ] : 6.95

Assessment [ AverageAPI ] : 10.43

#### 4.4 Placement, Higher Studies and Entrepreneurship (30)

Total Marks 29.20

Institute Marks : 29.20

| Item                                                                                                                                         | LYG( 2017-18 ) | LYGm1( 2016-17 ) | LYGm2( 2015-16 ) |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------|------------------|
| Total No of Final Year Students(N)                                                                                                           | 67.00          | 77.00            | 76.00            |
| No of students placed in the companies or goverment sector(X)                                                                                | 67.00          | 68.00            | 68.00            |
| No of students admitted to higher studies with valid qualifying scores(GATE or equivalent State or National Level tests, GRE, GMAT etc.) (Y) | 0.00           | 3.00             | 8.00             |
| No of students turned enterpreneur in engineering/technology (Z)                                                                             | 0.00           | 0.00             | 0.00             |
| Placement Index [ (X+Y+Z)/N ] :                                                                                                              | 1.00           | 0.92             | 1.00             |

Average Placement [ (P1 + P2 + P3)/3 ] : 0.97

Assessment [ 30 \* Average Placement ] : 29.20

Program Name : Information Science & Engg.

Assessment Year : 2020-21 (CAYm1)

| S.No | Student Name          | Enrollment No | Employee Name             | Appointment No     |
|------|-----------------------|---------------|---------------------------|--------------------|
| 1    | Aishwarya Bhairamatti | 2BA17IS003    | TATA Consultancy Services | TCSL/CT20203255365 |
| 2    | Amogh B Viraktamath   | 2BA17IS009    | TATA Consultancy Services | TCSL/CT20192645254 |
| 3    | Atharva A Kulkarni    | 2BA17IS016    | TATA Consultancy Services | TCSL/DT20206735331 |
| 4    | Kaushal A Diwakar     | 2BA17IS030    | TATA Consultancy Services | TCSL/DT20206829873 |
| 5    | Kishor Parvatikar     | 2BA17IS031    | TATA Consultancy Services | TCSL/CT20192669814 |
| 6    | Neeta Biradar         | 2BA17IS038    | TATA Consultancy Services | TCSL/CT20192670001 |
| 7    | Pradeep P Guled       | 2BA17IS044    | TATA Consultancy Services | TCSL/DT20206493177 |
| 8    | Prathiksha P Chetana  | 2BA17IS047    | TATA Consultancy Services | TCSL/CT20192653503 |

|    |                         |            |                                    |                           |
|----|-------------------------|------------|------------------------------------|---------------------------|
| 9  | Rakshita S Kodekal      | 2BA17IS052 | TATA Consultancy Services          | TCSL/CT20192656431        |
| 10 | Sneha B Angadi          | 2BA17IS063 | TATA Consultancy Services          | TCSL/DT20195177503        |
| 11 | Supreeta Gudagunti      | 2BA17IS067 | TATA Consultancy Services          | TCSL/CT20192648891        |
| 12 | Janhavi S Mokhashi      | 2BA17IS023 | Nggawe Nirman Technologies         | NNT/HR/2021/1006          |
| 13 | Yashashree S Kabbir     | 2BA17IS081 | TATA ELXSI                         | CINL851101KA1989PLC009968 |
| 14 | Akshata P Petkar        | 2BA17IS007 | Vayavva Labs                       | PTC040077                 |
| 15 | Abdur Rahman            | 2BA17IS001 | Glassbeam Software                 | GB/SA/01/21               |
| 16 | Akshata R Godakhindi    | 2BA17IS008 | Nggawe Nirman Technologies         | NNT/HR/2021/1039          |
| 17 | Anusha Kulkarni         | 2BA17IS011 | Nggawe Nirman Technologies         | NNT/HR/2021/1051          |
| 18 | Ashwini Halli           | 2BA17IS015 | Nggawe Nirman Technologies         | NNT/HR/2021/1005          |
| 19 | Pratima Deshpande       | 2BA17IS049 | Nggawe Nirman Technologies         | NNT/HR/2021/1007          |
| 20 | Nidhi S. Bangalore      | 2BA17IS039 | HCL Technologies                   | HCL/HR/2021/30            |
| 21 | Prathmesh Kalburgi      | 2BA17IS048 | Infosys                            | HR/3T/1001713590/2122     |
| 22 | Shreeshail Talikoti     | 2BA17IS060 | Bitwise Solutions                  | BS/HR/2021/27             |
| 23 | Anvitha G Vijapur       | 2BA17IS012 | Aggne Global IT Services           | AGIS/HR/2021/21           |
| 24 | Aparna D                | 2BA17IS013 | TATA Consultancy Services          | TCSL/CT20192657563        |
| 25 | Bhagyashree A           | 2BA17IS020 | Aggne Global IT Services           | AGIS/HR/2021/22           |
| 26 | Poornima Bhavi          | 2BA17IS043 | Mindtree Limited                   | ML/HR/2021/22             |
| 27 | Priyanka S Sthavaramath | 2BA17IS050 | Aggne Global IT Services           | AGIS/HR/2021/23           |
| 28 | Shreya Bali             | 2BA17IS061 | Aggne Global IT Services           | AGIS/HR/2021/24           |
| 29 | Sweeti Vandure          | 2BA17IS073 | HCL Technologies                   | HCL/HR/2021/31            |
| 30 | Vidyashri Mudagal       | 2BA17IS076 | TATA Consultancy Services          | TCSL/CT20192657564        |
| 31 | Vijayalaxmi M Bevoor    | 2BA17IS078 | Aggne Global IT Services           | AGIS/HR/2021/25           |
| 32 | Prafulla M Hiremath     | 2BA17IS045 | Aggne Global IT Services           | AGIS/HR/2021/26           |
| 33 | Anirudh Athani          | 2BA17IS082 | Infosys                            | HRD/3T/1002381107/21-22   |
| 34 | Bhagyawant Biradar      | 2BA17IS021 | Cognizant                          | 15564226                  |
| 35 | Mrityunjay A Palled     | 2BA17IS035 | Nggawe Nirman Technologies         | NNT/HR/2021/1041          |
| 36 | Shrihari Kulkarni       | 2BA17IS062 | Nggawe Nirman Technologies         | NNT/HR/2021/1042          |
| 37 | Manjunath Pattanashetti | 2BA17IS034 | Nggawe Nirman Technologies         | NNT/HR/2021/1040          |
| 38 | Pallavi M Naik          | 2BA17IS040 | SagarSoft Limited                  | SL/HR/2021/28             |
| 39 | Vijaykumar Hanasi       | 2BA16IS090 | Redbot Innovations Private Limited | RIPL/HR/2021/24           |
| 40 | Manish Kumar            | 2BA16IS037 | Redbot Innovations Private Limited | RIPL/HR/2021/25           |
| 41 | Sudharani Toravi        | 2BA16IS078 | Girmiti Software Private Limited   | GSPL/HR/2021/01           |

|    |                        |            |                                                 |                           |
|----|------------------------|------------|-------------------------------------------------|---------------------------|
| 42 | Rakesh P Naik          | 2BA17IS051 | Girmiti Software Private Limited                | GSPL/HR/2021/02           |
| 43 | Basavaraj Gulappagol   | 2BA17IS017 | Girmiti Software Private Limited                | GSPL/HR/2021/03           |
| 44 | Kalpana S Hosamani     | 2BA17IS028 | Accenture                                       | C10300426                 |
| 45 | Kalpita Devananganvi   | 2BA17IS029 | ATA Consultancy Services                        | TCSL/DT20206738594        |
| 46 | Laxmee Medli           | 2BA17IS032 | Girmiti Software Private Limited                | GSPL/HR/2021/04           |
| 47 | Parimala C             | 2BA17IS041 | Girmiti Software Private Limited                | GSPL/HR/2021/05           |
| 48 | Sushma Bhavi           | 2BA17IS070 | Girmiti Software Private Limited                | GSPL/HR/2021/06           |
| 49 | Swati S Arakeri        | 2BA17IS072 | Infosys                                         | HRD/3T/1002381404/21-22   |
| 50 | Sahana                 | 2BA17IS083 | Girmiti Software Private Limited                | GSPL/HR/2021/07           |
| 51 | Allamaprabhu Yechhi    | 2BA18IS400 | Herman Miller Furniture (India) Private Limited | CIN-U52333KA2007PTC042546 |
| 52 | Jotshna Kulkarni       | 2BA17IS026 | Cognizant                                       | 15687539 26               |
| 53 | Suresh Angadi          | 2BA17IS069 | Wipro                                           | 21091784                  |
| 54 | Renuka                 | 2BA17IS054 | EY Global Delivery Service                      | U7499KA2016PTC093751      |
| 55 | Aishwarya Chiniwar     | 2BA16IS002 | Infosys                                         | HRD/3T/1002049228/21-22   |
| 56 | Shahreen Shaikh        | 2BA17IS085 | Infosys                                         | HRD/3T//21-22/1001721304  |
| 57 | Sushma S. Kudlannavar  | 2BA16IS083 | Sprinklr india Private Limited                  | SIPL/HR/2021/04           |
| 58 | Amulya V. Hunasigidad  | 2BA17IS010 | Accenture                                       | C10300425                 |
| 59 | Poornima Shirahatti    | 2BA17IS042 | Accenture                                       | C10090250                 |
| 60 | Shashank S Sunadholi   | 2BA17IS059 | Accenture                                       | CI14072021                |
| 61 | Spoorthi A Kankanameli | 2BA17IS084 | Accenture                                       | CI100138055               |
| 62 | Souharda R Maishale    | 2BA17IS064 | Wipro                                           | 21064784                  |
| 63 | Yamanoor Mabrumkar     | 2BA17IS080 | Infosys                                         | HRD/3T/1002409492/21-22   |
| 64 | Neha S Hemgire         | 2BA18IS401 | SagarSoft Limited                               | SL/HR/2021/29             |
| 65 | Aishwarya Ankalagi     | 2BA17IS004 | Mphasis Limited                                 | MPH_ CD2021-3033          |
| 66 | Akshata Patil          | 2BA17IS005 | Wipro                                           | 22808884                  |
| 67 | Laxmi Dhulakhed        | 2BA16IS032 | Capgemini                                       | 5557678/1113943           |

**Assessment Year : 2019-20 (CAYm2)**

| S.No | Student Name          | Enrollment No | Employee Name                          | Appointment No        |
|------|-----------------------|---------------|----------------------------------------|-----------------------|
| 1    | P D Sarojini          | 2BA16IS043    | Tech Mahindra                          | 826315/1928927/ELTP   |
| 2    | Bhoomika Kolaki       | 2BA16IS017    | Conseillers en gestion et informatique | U72200KA1990PTC019138 |
| 3    | Pooja Chavan          | 2BA16IS047    | Larsen & Toubro                        | LTTS-Mysore/HR/327249 |
| 4    | Amanullah Chimmagi    | 2BA16IS401    | Conseillers en gestion et informatique | U72200KA1990PTC019138 |
| 5    | Ashwini Badami        | 2BA16IS013    | Cognizant                              | 18959506              |
| 6    | Manjunath Bhovivaddar | 2BA16IS405    | IBM                                    | IBM/HR/2021/5         |

|    |                        |            |                                 |                         |
|----|------------------------|------------|---------------------------------|-------------------------|
| 7  | Shridhar K.            | 2BA16IS070 | Tech Mahindra                   | 839093/1945715/ELTP     |
| 8  | Aishwarya Dalabhanjan  | 2BA15IS006 | G&M Global Solutions            | GM/HR/2020/4            |
| 9  | monica                 | 2BA15IS039 | Deloitte                        | Del/HR/2021/26          |
| 10 | Anita Ullegaddi        | 2BA16IS009 | Tata Consultancy Services       | TCSL/DT20184291285      |
| 11 | Kotresh S Hosalli      | 2BA16IS028 | Tata Consultancy Services       | TCSL/DT20184289208      |
| 12 | Laxmi Shirahatti       | 2BA16IS033 | Tata Consultancy Services       | TCSL/CT20192753364      |
| 13 | Madhusudan S Hebsur    | 2BA16IS034 | Tata Consultancy Services       | TCSL/CT20182377621      |
| 14 | Nidhi M Mahalmani      | 2BA16IS041 | Tata Consultancy Services       | TCSL/DT20184290363      |
| 15 | Parvati Belagali       | 2BA16IS044 | Tata Consultancy Services       | TCSL/DT/20184291487     |
| 16 | Priyanka B Sajjan      | 2BA16IS052 | Tata Consultancy Services       | TCSL/CT20182374714      |
| 17 | Sakshi C Nadagoudra    | 2BA16IS059 | Tata Consultancy Services       | TCSL/DT20184285395      |
| 18 | Swati Burji            | 2BA16IS085 | Tata Consultancy Services       | TCSL/CT20182372745      |
| 19 | VijaylaxmiTalwade      | 2BA16IS093 | Tata Consultancy Services       | TCSL/CT20182374153      |
| 20 | Revanasidda            | 2BA16IS057 | Tata Consultancy Services       | TCSL/CT20182372573      |
| 21 | Akshata Kulkarni       | 2BA16IS008 | Infosys                         | HRD/1000501212/20-21    |
| 22 | Anupama Javalagi       | 2BA16IS011 | Infosys                         | HRD1000501221/20-21     |
| 23 | Nasrulla M Kokani      | 2BA16IS040 | Infosys                         | HRD/3T/1000501231/20-21 |
| 24 | Sanjan A Vadi          | 2BA16IS062 | Infosys                         | HRD/3T/1000500657/20-21 |
| 25 | Abhishek Nagappanavar  | 2BA16IS001 | SLK Software Services           | U72200KA2000PTCQ27503   |
| 26 | Divya M Kadewadi       | 2BA16IS023 | SLK Software Services           | U72200KA2000PTCQ27503   |
| 27 | Chaitra Nagraj D       | 2BA16IS019 | ADP Private Limited             | U72200TG2015PTC101168   |
| 28 | Sanjeev S Kulkarni     | 2BA16IS063 | Global Edge Software Limited    | GESL/HR/2020/23         |
| 29 | Varun K Sunagar        | 2BA16IS088 | Global Edge Software Limited    | GESL/HR/2020/30         |
| 30 | Suresh Darga           | 2BA16IS080 | Global Edge Software Limited    | GESL/HR/2020/31         |
| 31 | Shashank A Karehonn    | 2BA16IS066 | International Business Machines | 4254086                 |
| 32 | Shruti Bhanvi          | 2BA16IS072 | International Business Machines | IN_150_263330BR_4404706 |
| 33 | Sushma R Kerakalamatti | 2BA16IS082 | IQVIA                           | U74140KA2003PTC032950   |
| 34 | Raghavendra Samprati   | 2BA16IS054 | ABC                             | ABC20R3176              |
| 35 | Prajwal N Deshpande    | 2BA16IS049 | Cognizant                       | 894612                  |
| 36 | Arpita M Kalburgi      | 2BA16IS012 | Cognizant                       | 14049222                |
| 37 | Ashwini Mandi          | 2BA16IS014 | Sasken                          | 263494                  |
| 38 | Komal P Badnikai       | 2BA16IS027 | Sasken                          | 263492                  |
| 39 | Sanmati Hunshikatti    | 2BA16IS064 | Sasken                          | 263493                  |



|    |                          |            |                                            |                                        |
|----|--------------------------|------------|--------------------------------------------|----------------------------------------|
| 40 | Sneha Awaji              | 2BA16IS073 | Sasken                                     | 263470                                 |
| 41 | Sonal R Warkar           | 2BA16IS074 | Sasken                                     | 263472                                 |
| 42 | TejashwiniGaniger        | 2BA16IS086 | Karnataka State Remote Sensing Application | KSRSAC/93/Contractual Appointment/2020 |
| 43 | Kavita Nidasheshi        | 2BA16IS024 | IQVIA                                      | U74140KA2003PTC032950                  |
| 44 | Sushmita Pujar           | 2BA16IS084 | Tata Consultancy Services                  | TCSL/CT20203366887                     |
| 45 | SpoortiVandakudri        | 2BA16IS075 | Tata Consultancy Services                  | TCSL/DT20184290903                     |
| 46 | Aishwarya Joshi          | 2BA15IS009 | SkyclipIT                                  | 29AAWC59663e12f                        |
| 47 | Krishna Mutalik Desai    | 2BA16IS029 | Tata Consultancy Services                  | TCSL/DT20184285403                     |
| 48 | Anand Illal              | 2BA17IS402 | L & T Technology Services Limited          | LTTS-Mysore/HR/328490                  |
| 49 | Manthan Betageri         | 2BA17IS406 | Test Yantra                                | U72200KA2007PTC044701                  |
| 50 | Nikita Maradur           | 2BA16IS042 | Tech Mahindra                              | 826315/1936675/ELTP                    |
| 51 | Akhila Naik              | 2BA17IS007 | Shashi Exports PVT LTD                     | U18101DL2005PTC/38730                  |
| 52 | Vaishnavi Kulkarni       | 2BA17IS412 | Terra Pay                                  | U74140KA2020PTC133630                  |
| 53 | Tejashwini Ganganagoudar | 2BA15IS079 | Infinite Technology Solutions              | ICSL/Employee/11890/10399/22062021     |
| 54 | Sushma Patil             | 2BA16IS081 | NTT DaTa Sevices                           | 41DB6006-4ADA-4655-889-81BA37E41A4A    |
| 55 | Bhagyashree Patil        | 2BA16IS015 | NTT DaTa Sevices                           | 9451C694-9A62-4284-8778-BC74DAD4A999   |
| 56 | Vinayak Gavaroji         | 2BA16IS094 | AJAPRO AI Technologies                     | AJ/HSR/HR/05/2020                      |
| 57 | Shreya Tapashetti        | 2BA16IS069 | accenture                                  | C9276835                               |
| 58 | Keshav Desai             | 2BA16IS026 | Mindtree                                   | TN/80017782/21                         |
| 59 | Mallamma Patil           | 2BA16IS036 | amdocs                                     | 2021-04-DVCI-P-M420597-2               |
| 60 | Riyaben Patel            | 2BA16IS058 | Tata Consultancy Services                  | TCSL/CT/20203463782/Bangalore          |
| 61 | Laxmi Angadi             | 2BA16IS031 | Conseillers en gestion et informatique     | CGI/2021/HR/2021/25                    |
| 62 | ShrinidhiKulkarni        | 2BA16IS071 | Tech Mahindra                              | 793567/1840084/ELTP/2021/Rev I         |
| 63 | BindushriNagajjanavar    | 2BA16IS018 | IQVIA                                      | U74140KA2003PTC032509                  |
| 64 | Rashmi Malaji            | 2BA16IS055 | IQVIA                                      | U74140KA2003PTC032509                  |
| 65 | chetan                   | 2BA15IS092 | Capgemini                                  | 4392012/715621                         |
| 66 | Ajit Rathod              | 2BA16IS005 | Graphx                                     | GX/HR/2022/08                          |
| 67 | Bhuvaneshwari Ukkali     | 2BA17IS403 | GBUITS                                     | GS/HR/2019/01                          |
| 68 | Jayashri Kuri            | 2BA17IS404 | GBUITS                                     | GS/HR/2019/02                          |

**Assessment Year : 2018-19 (CAYm3)**

| S.No | Student Name        | Enrollment No | Employee Name             | Appointment No     |
|------|---------------------|---------------|---------------------------|--------------------|
| 1    | Mranalini M Patil   | 2BA15IS040    | Tata Consultancy Services | TCSL/CT20172153241 |
| 2    | Parvati C Balulmath | 2BA15IS046    | Tata Consultancy Services | TCSL/CT20182374675 |
| 3    | Prakash V Tadasad   | 2BA15IS050    | Tata Consultancy Services | TCSL/CT20172153435 |

|    |                        |            |                           |                            |
|----|------------------------|------------|---------------------------|----------------------------|
| 4  | Aishwarya Mokhashi     | 2BA15IS011 | Tata Consultancy Services | TCSL/CT20172153315         |
| 5  | AkshataAladi           | 2BA15IS015 | Tata Consultancy Services | TCSL/CT20172153301         |
| 6  | AnnapoornaKotagi       | 2BA15IS017 | Tata Consultancy Services | TCSL/CT20182499553         |
| 7  | Jyoti Umesh Ambi       | 2BA15IS029 | Tata Consultancy Services | TCSL/CT20182374681         |
| 8  | Lakshmi B Kakkalameli  | 2BA15IS031 | Tata Consultancy Services | TCSL/CT20172153236         |
| 9  | Soumya P Munavalli     | 2BA15IS073 | Tata Consultancy Services | TCSL/CT20182374692         |
| 10 | Suman Sanjay Herkal    | 2BA15IS077 | Tata Consultancy Services | TCSL/CT20172153271/1151634 |
| 11 | Vidyashree G Udupi     | 2BA15IS087 | Tata Consultancy Services | TCSL/CT20172153293         |
| 12 | Ajeey Ghale            | 2BA15IS014 | Tata Consultancy Services | TCSL/CT20172153231         |
| 13 | Abhishek P Bembalgi    | 2BA15IS004 | Tata Consultancy Services | TCSL/CT20172153230         |
| 14 | Sakshi S Sirdesai      | 2BA15IS064 | Tata Consultancy Services | TCSL/CT20172153337         |
| 15 | Usha Tukappanavar      | 2BA15IS080 | Tata Consultancy Services | TCSL/CT20172153318         |
| 16 | Ambika                 | 2BA15IS016 | OPPO                      | OP/HR/2019/31              |
| 17 | Bhagyshree Pawar       | 2BA15IS021 | OPPO                      | OP/HR/2019/30              |
| 18 | GollaleshM Budihal     | 2BA15IS028 | Kodnest                   | KOD/HR/2019/15             |
| 19 | Lakshmi Murteli        | 2BA15IS032 | Kodnest                   | KOD/HR/2019/16             |
| 20 | Bhumika S Kaddugol     | 2BA15IS022 | Silverpeak                | SP/HR/2019/26              |
| 21 | Madhu H Patil          | 2BA15IS036 | GlobalEdge                | GESL/HR/2019/13            |
| 22 | Aravind Gurav          | 2BA15IS018 | Infosys                   | HRD/3T/19-20/13075146      |
| 23 | Abhishek B Viraktamath | 2BA15IS001 | Infosys                   | HRD/3T/19-20/13075143      |
| 24 | Aishwarya B Kovalli    | 2BA15IS005 | Infosys                   | HRD/3T/19-20/13075144      |
| 25 | Varadaneshwari Patil   | 2BA15IS091 | Infosys                   | HRD/3T/19-20/13075159      |
| 26 | Priyanka Yakkundi      | 2BA15IS054 | Infosys                   | HRD/3T/19-20/13075155      |
| 27 | Madhu Dodamani         | 2BA15IS035 | Sasken                    | 259328                     |
| 28 | Arun Marol             | 2BA15IS019 | CMS                       | 2019-BTM/BEC/04-418        |
| 29 | Spoorti M Kumatgi      | 2BA15IS075 | HireCraft                 | HR/HC/OFR/4418/2020        |
| 30 | Nishat Anjum           | 2BA15IS043 | Mindtree                  | TN/80014093/20             |
| 31 | Pooja R Zingade        | 2BA16IS409 | Mindtree                  | TN/80013627/20             |
| 32 | Vinaykumar Mirakjkar   | 2BA13IS074 | Cerner                    | U72200KA2014FTC13004       |
| 33 | Seema Ramesh Badnur    | 2BA15IS065 | Tata Consultancy Services | TCSL/CT20172153279         |
| 34 | Shreya S Nargund       | 2BA15IS070 | Tata Consultancy Services | TCSL/CT201721532476        |
| 35 | Vaishnavi S Kulkarni   | 2BA15IS084 | Tata Consultancy Services | TCSL/CT20172153276         |
| 36 | Sneha S Yaranal        | 2BA15IS071 | Thinq Techno Systems      | ZH/HR/2019                 |

|    |                       |            |                                                             |                            |
|----|-----------------------|------------|-------------------------------------------------------------|----------------------------|
| 37 | Basavaraj Bandiwaddar | 2BA16IS403 | Meru Info Solutions                                         | MIS/HR/2019/01             |
| 38 | Keerthan V            | 2BA16IS406 | Fiport                                                      | U72200KA2012PTC061974      |
| 39 | Pushpak Bhosale       | 2BA16IS410 | ICET IT Solutions                                           | U72200KA2018PTC113014      |
| 40 | Prema S Benur         | 2BA15IS052 | IBM                                                         | 1N_68_314292BR_4748728     |
| 41 | Priyanka N Yaliwal    | 2BA15IS053 | IBM                                                         | 1N_68_314292BR_4748661     |
| 42 | Shravya Shastri       | 2BA15IS068 | Qualitest                                                   | U72900KA2008PTC047411      |
| 43 | Vaibhavalaxmi R K     | 2BA15IS082 | Accenture                                                   | C8511594                   |
| 44 | Shreya R Jainapur     | 2BA15IS069 | Accenture                                                   | C8440086                   |
| 45 | Pragathi S Papanur    | 2BA15IS049 | Accenture                                                   | C8429035                   |
| 46 | Vaishnavi Deshpande   | 2BA15IS083 | Accenture                                                   | C8364475                   |
| 47 | Vinayak. Belagur      | 2BA15IS088 | Appsource                                                   | APPS/09102019              |
| 48 | Yeshwanth NMarkod     | 2BA15IS090 | Coreflex Solutions pvt ltd                                  | CFS/ OFF LTR / 2020-21 / B |
| 49 | Sunil Kumar           | 2BA15IS078 | Cognizant                                                   | 16395852                   |
| 50 | Subham                | 2BA15IS076 | Ebix Technologies                                           | ETPL/REC/PUN/2021/19       |
| 51 | Anand Karanandi       | 2BA16IS400 | HCL Technologies                                            | L7414ODL1991PLC046369      |
| 52 | Manjary Patil         | 2BA13IS024 | GADGET                                                      | U72900KA2013PTC067784      |
| 53 | Sneha Chama           | 2BA13IS019 | Cognizant                                                   | 14167155                   |
| 54 | Sharanamma D          | 2BA15IS066 | Capgemini                                                   | 3422216/856583             |
| 55 | Aishwarya Halagali    | 2BA15IS007 | SLK                                                         | SLK94039                   |
| 56 | Santosh Banagar       | 2BA15IS414 | Karnataka State Electronics Development Corporation Limited | U75112KA19765GC003055      |
| 57 | Rajeshwari Oni        | 2BA15IS057 | DXC Technology                                              | DXC/HR/2019/10             |
| 58 | Dhaneshwari koppad    | 2BA15IS023 | Maintec                                                     | EMP/AL/DBK/15112021/161    |
| 59 | Jyoti Magi            | 2BA16IS405 | GBUITS                                                      | GS/HR/2020/01              |
| 60 | Deepa patted          | 2BA15IS024 | GBUITS                                                      | GS/HR/2020/02              |
| 61 | Basamma S Jigalur     | 2BA16IS402 | GBUITS                                                      | GS/HR/2020/03              |
| 62 | Sameenabanu Firozi    | 2BA16IS413 | GBUITS                                                      | GS/HR/2020/04              |
| 63 | Spoorti Atalatti      | 2BA16IS414 | GBUITS                                                      | GS/HR/2020/05              |
| 64 | Rahul Jalihal         | 2BA15IS413 | GBUITS                                                      | GS/HR/2020/06              |
| 65 | Sushma Antargond      | 2BA15IS419 | GBUITS                                                      | GS/HR/2020/07              |
| 66 | Medha C               | 2BA16IS407 | Girmitti                                                    | GT/HR/2022/31              |
| 67 | Rahul Sutar           | 2BA16IS411 | Crimsonbeans                                                | CB/HR/2022/07              |
| 68 | M Jyoti               | 2BA15IS034 | GBUITS                                                      | GS/HR/2020/08              |

## 4.5 Professional Activities (20)

Total Marks 20.00

**4.5.1 Professional societies/chapters and organizing engineering events (5)**

Institute Marks : 5.00

**A. Professional societies/chapter events**

The following table 4.1, 4.2, and 4.3 show the list of various events organized by **professional societies/chapters** in the academic years 2018-19, 2019-20, and 2020-21 respectively.

**Table 4.1. List of events for the AY 2018-19**

| Sl. No | Event Name | Event Date               | Organized by                                                                                                 | POs Addressed | PSOs Addressed |
|--------|------------|--------------------------|--------------------------------------------------------------------------------------------------------------|---------------|----------------|
| 1      | CODE-CODE  | 16-02-2019 to 17-02-2019 | NOVUS'19 National level technical fest, BEC-IEEE WIE AG(SBA35261), Basaveshwar Engineering College, Bagalkot | All POs       | All PSOs       |
| 2      | NOVUS'19   | 16-2-2019 to 17-2-2019   | IEEE, Basaveshwar Engineering College, Bagalkot                                                              | All POs       | All PSOs       |

**Table 4.2. List of event for the AY 2019-20**

| Sl. No | Event Name | Event Date | Organized by                                                                                                                 | POs Addressed | PSOs Addressed |
|--------|------------|------------|------------------------------------------------------------------------------------------------------------------------------|---------------|----------------|
| 1      | TARANG     | 11-01-2020 | ISOI-BEC Student Chapter, Department of Electronics & Instrumentation Engineering, Basaveshwar Engineering College, Bagalkot | All POs       | All PSOs       |

**Table 4.3. List of event for the AY 2020-21**

| Sl. No | Event Name                                       | Event Date               | Organized by                                                                                                                          | POs Addressed | PSOs Addressed |
|--------|--------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------|
| 1.     | BRAINIACS                                        | 14-11-2021 to 15-11-2021 | BEC-IEEE WIE AG(35261A), Basaveshwar Engineering College, Bagalkot                                                                    | All POs       | All PSOs       |
| 2.     | WISION-2.0                                       | 07-03-2021               | BEC-IEEE WIE AG(SBA35261), Basaveshwar Engineering College, Bagalkot                                                                  | All POs       | All PSOs       |
| 3.     | INQUISITION                                      | 30-05-2021               | BEC-IEEE WIE AG(SBA35261), Basaveshwar Engineering College, Bagalkot                                                                  | All POs       | All PSOs       |
| 4.     | C test                                           | 29-06-2021               | Basaveshwar Engineering College, Bagalkot                                                                                             | All POs       | All PSOs       |
| 5.     | IOT Based Monitoring Systems                     | 22-05-2021               | IEEE Information Theory Society (ITS) Bangalore Chapter                                                                               | All POs       | All PSOs       |
| 6.     | Effective Resume Writing                         | 22-05-2021               | IEEE Student Branch (35261A), Basaveshwar Engineering College, Bagalkot                                                               | All POs       | All PSOs       |
| 7.     | Etiquettes of Writing Technical Thesis and Paper | 18-07-2021               | IEEE North Karnataka Sub Section in Collaboration with BEC(A) IEEE Student Branch (35261A), Basaveshwar Engineering College, Bagalkot | All POs       | All PSOs       |

|     |                                                |                                |                                                                    |         |          |
|-----|------------------------------------------------|--------------------------------|--------------------------------------------------------------------|---------|----------|
| 8.  | Logitalker                                     | 27-06-2021                     | BEC-IEEE WIE AG(35261A), Basaveshwar Engineering College, Bagalkot | All POs | All PSOs |
| 9.  | Next –generation embedded systems and security | 24-07-2021                     | IEEE Circuits and Systems(CAS) Society Bangalore Chapter           | All POs | All PSOs |
| 10. | Prompt 2021                                    | 06-08-2021<br>to<br>07-08-2021 | AICTE sponsored IE student chapter, MIT Mysore                     | All POs | All PSOs |

## B. Engineering events

The following table 4.4, 4.5, and 4.6 show the list of various events organized by department in AY 2018-19, AY 2019-20, and AY 2020-21 respectively.

**Table 4.4. List of various events for the AY 2018-19**

| Sl. No. | Date       |            | Name of event                                                 | Organized Under | Coordinator(s)                         | Resource Person(s) & Address(es)                                                                      | POs Addressed    | PSOs Addressed |
|---------|------------|------------|---------------------------------------------------------------|-----------------|----------------------------------------|-------------------------------------------------------------------------------------------------------|------------------|----------------|
|         | From       | To         |                                                               |                 |                                        |                                                                                                       |                  |                |
| 01      | 13-8-2018  | 30-8-2018  | Pre-placement Training on Aptitude Aspects                    | RISE            | Prof. P.K.Deshpande                    | Shri. Shivakumar Kakkalamele, Vagdevi, Free Lance Trainer                                             | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 02      | 10-08-2018 | 18-8-2018  | Induction Program                                             |                 | Dr. Shobha R. Patil                    | Shri Vinay Prabhakar, CEO, Technociate, Bengaluru                                                     | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 03      | 12-1-2019  | 13-1-2019  | SDP on Enterprise Application Development Using J2EE Part-I   | RISE            | Prof. P.K.Deshpande & Prof. S.N.Kugali | Prof. S.M.Magi, Dept. of MCA, BEC, Bagalkote<br>Prof. M.S.Shirur, Dept. of MCA, BEC, Bagalkote        | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 04      | 19-1-2019  | 20-1-2019  | SDP on Enterprise Application Development Using J2EE Part-II  | RISE            | Prof. P.K.Deshpande & Prof. S.N.Kugali | Prof. S.M.Magi, Dept. of MCA, BEC, Bagalkote<br>Prof. M.S.Shirur, Dept. of MCA, BEC, Bagalkote        | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 05      | 02-2-2019  | 03-02-2019 | Workshop on Android App Development                           | TEQIP-III       | Prof. P.K.Deshpande & Prof. S.N.Kugali | Mr. Naveen Pujar, HESCOM, Hubli                                                                       | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 06      | 17-02-2019 | 18-02-2019 | Workshop on Internet of Things (IOT)                          | RISE            | Prof. P.K.Deshpande & Prof. S.N.Kugali | Prof. Rajendrakumar Math, BLDEA'S CET, Vijayapur<br>Prof. Vijaykumar Sajjanar, BLDEA'S CET, Vijayapur | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 07      | 22-02-2019 | 23-02-2019 | SDP on Real Time Application Development and Deployment Cycle | TEQIP-III       | Prof. P.K.Deshpande & Prof. S.N.Kugali | Mr. Shivaling Sannalli, Thoughtworks, Hyderabad                                                       | 1,2, 3,4,9,10,12 | 1, 2, 3        |

|    |            |            |                                                  |      |                     |                                                             |                  |         |
|----|------------|------------|--------------------------------------------------|------|---------------------|-------------------------------------------------------------|------------------|---------|
| 08 | 26-04-2019 | 26-04-2019 | Project Exhibition - PROJECT EXPO 2K19           | RISE | Dr. L.B.Bhajantri   | NA                                                          | 1,2, 3,4,9,10,12 | 1, 2, 3 |
| 09 | 06-06-2019 | 13-06-2019 | Pre-placement Training on Aptitude Aspects       | RISE | Prof. P.K.Deshpande | Shri. Shivakumar Kakkalameli, Vagdevi PU College, Bagalkote | 1,2, 3,4,9,10,12 | 1, 2, 3 |
| 10 | 14-06-2019 | 15-06-2019 | Pre-placement Training on Technical Aspects      | RISE | Prof. P.K.Deshpande | Mrs. Ragini, Innovations Unlimited, Bengaluru               | 1,2, 3,4,9,10,12 | 1, 2, 3 |
| 11 | 16-06-2019 | 16-06-2019 | Pre-placement Training on Verbal Ability Aspects | RISE | Prof. P.K.Deshpande | Mr. Manjesh S.P, Innovations Unlimited, Bengaluru           | 1,2, 3,4,9,10,12 | 1, 2, 3 |
| 12 | 17-06-2019 | 18-06-2019 | Pre-placement Training on Technical Aspects      | RISE | Prof. P.K.Deshpande | Mr. Nitin N. Rao, Outstanding 20, Musuru                    | 1,2, 3,4,9,10,12 | 1, 2, 3 |

Table 4.5. List of various events for the AY 2019-20

| Sl. No. | Date       |            | Name of event                                            | Organized Under | Coordinator(s)                         | Resource Person(s) & Address(es)                                                                  | POs Addressed    | PSOs Addressed |
|---------|------------|------------|----------------------------------------------------------|-----------------|----------------------------------------|---------------------------------------------------------------------------------------------------|------------------|----------------|
|         | From       | To         |                                                          |                 |                                        |                                                                                                   |                  |                |
| 01      | 11-01-2020 | 11-1-2020  | Techies & Cookies (Programming & Coding)                 | RISE            | Dr.L.B.Bhajantri & Prof. V.S.Patil     | NA                                                                                                | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 02      | 18-01-2020 | 19-01-2020 | Pre-placement Training on Technical Aspects              | RISE            | Prof. P.K.Deshpande                    | Mr. Deepak Mehta, #include coding academy, Hubli                                                  | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 03      | 15-02-2020 | 15-02-2020 | Guest lecture on "Unlocking Internet to Lock the Things" | RISE            | Dr.L.B.Bhajantri & Prof. V.S.Patil     | Dr. Bharati.M. Arakeri Professor & Head, Dept. of AI & ML, BMSIT, Bangalore,                      | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 04      | 17-05-2020 | 25-06-2020 | Pre-placement Training on Technical Aspects              | RISE            | Prof. P.K.Deshpande & Dr. B.M.Reshmi   | Mr. Deepak Mehta, #include coding academy, Hubli                                                  | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 05      | 04-09-2019 | 04-09-2019 | Guest lecture on Internet of Things (IOT)                | RISE            | Prof. P.K.Deshpande & Prof. S.N.Kugali | Dr. Shivamurthy G VTU Center for PG Studies, Bangalore Region, VIAT, Muddenahalli Chikkaballapur, | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 06      | 16-09-2019 | 16-09-2019 | Pre-placement Training on Technical Aspects              | RISE            | Prof. P.K.Deshpande & Dr. B.M.Reshmi   | Mr. Deepak Mehta, #include coding academy, Hubli                                                  | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 07      | 24-10-2019 | 25-10-2019 | SDP on Data Structure using C                            | RISE            | Dr.L.B.Bhajantri & Prof. V.S.Patil     | Mr.Krishnanand and Harikiran Amphisoft Technologies Pvt Ltd Mysuru                                | 1,2, 3,4,9,10,12 | 1, 2, 3        |

|    |            |            |                                                    |      |                        |    |                  |         |
|----|------------|------------|----------------------------------------------------|------|------------------------|----|------------------|---------|
| 08 | 30-05-2020 | 30-06-2020 | Online quiz on Artificial Intelligence             | RISE | Prof. P.K.Deshpande    | NA | 1,2, 3,4,9,10,12 | 1, 2, 3 |
| 09 | 30-05-2020 | 30-06-2020 | Online quiz on Java Programming                    | RISE | Prof. P.S.Puranik      | NA | 1,2, 3,4,9,10,12 | 1, 2, 3 |
| 10 | 30-05-2020 | 30-06-2020 | Online quiz on Computer Networks                   | RISE | Prof. D.I.Kalappanavar | NA | --               | --      |
| 11 | 30-05-2020 | 30-06-2020 | Online quiz on Software Testing                    | RISE | Prof. G.B.Shettar      | NA | --               | --      |
| 12 | 30-05-2020 | 30-06-2020 | Online quiz on Micro Controller & Embedded Syatems | RISE | Prof. S.N.Kugali       | NA | --               | --      |

Table 4.6. List of various events for the AY 2020-21

| Sl. No. | Date       |            | Name of event                                                    | Organized Under | Coordinator(s)                                                  | Resource Person(s) & Address(es)                         | POs Addressed    | PSOs Addressed |
|---------|------------|------------|------------------------------------------------------------------|-----------------|-----------------------------------------------------------------|----------------------------------------------------------|------------------|----------------|
|         | From       | To         |                                                                  |                 |                                                                 |                                                          |                  |                |
| 01      | 9.10.2020  | 20.10.2020 | Pre-placement Training on Technical Aspects                      | RISE            | Dr. B. M. Reshmi & Prof. P.K.Deshpande                          | Mr. Deepak Mehta, #include coding academy, Hubli         | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 02      | 9.10.2020  | 20.10.2020 | Pre-placement Training on Aptitude Aspects                       | RISE            | Dr. B. M. Reshmi & Prof. P.K.Deshpande                          | Shri. Shivakumar Kakkalamele, Freelance Trainer          | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 03      | 01-12-2020 | 01-12-2020 | Webinar on "Ideation"                                            | RISE            | Dr. S.P.Bangarashetti & Prof. R. B.Math                         | Shri Aniruddha Kulkarni, USA                             | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 04      | 08.11.2020 | 08.11.2020 | Webinar on "How to Start a STARTUP"                              | RISE            | Dr. S.P.Bangarashetti & Prof. R. B.Math                         | Mr. Mandar R. Mutalikdesai and Mr. Vinay Bhardwaj        | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 05      | 23-03-2021 | 23-03-2021 | Technical talk on digital modernization and digital marketing    | RISE            | Dr. S. R. Patil & P.K.Deshpande                                 | Mr. Mohammad Jaliha, Insystel Technology Solutions, Pune | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 06      | 19-03-2021 | 21-03-2021 | SDP on ASP.NET & XML                                             | RISE            | Dr. S. R. Patil & P.K.Deshpande                                 | Miss. Leena Aruluswamy, SmarTeciT Solutions, Hubli       | 1,2, 3,4,9,10,12 | 1, 2, 3        |
| 07      | 27-04-2021 | 04-05-2021 | Online student development programme on "Advanced C Programming" | RISE            | Dr. S. R. Patil & Prof. Vijayalaxmi Patil & Prof. P.K.Deshpande | Prof. S.S.Gujarathi, Dept. of MCA, BEC, Bagalkote        | 1,2, 3,4,9,10,12 | 1, 2, 3        |

|    |            |             |                                                        |      |                                                                   |                                                        |                  |         |
|----|------------|-------------|--------------------------------------------------------|------|-------------------------------------------------------------------|--------------------------------------------------------|------------------|---------|
| 08 | 11-05-2021 | 25-05-2021. | Online student development programme on "Revisiting C" | RISE | Dr. S. R. Patil<br>Prof. Vijayalaxmi Patil<br>Prof. P.K.Deshpande | Prof. S.S.Gujarathi, Dept. of MCA, BEC, Bagalkote      | 1,2, 3,4,9,10,12 | 1, 2, 3 |
| 09 | 05-05-2021 | 26-06-2021  | Pre-placement Training on Technical Aspects            | RISE | Dr. B. M. Reshmi & P.K.Deshpande                                  | Mr. Deepak Mehta, Prof. #include coding academy, Hubli | 1,2, 3,4,9,10,12 | 1, 2, 3 |

#### 4.4.2 Publication of technical magazines, newsletters, etc. (5)

Institute Marks : 5.00

Every year the department has been publishing newsletters that includes activities like seminars, webinars, quizzes, conference/journal publications, SDPs, and FDPs. Also includes student achievements and participation in various state/national level events. These documents are properly designed and the newsletter of that academic year will be released. The following table 4.7 shows the list newsletters for various academic years.

Table 4.7. Newsletter details.

| Sl. No. | Academic Year | Title of Newsletter | Editors                                                                                                                 | Month and Volume No. |
|---------|---------------|---------------------|-------------------------------------------------------------------------------------------------------------------------|----------------------|
| 01      | 2018-19       | NISE - 19           | Prof. P. K. Deshpande<br>Mr. Abhishek Veeraktimath<br>Mr. Araving Gurav<br>Ms. Aishwarya Halagali<br>Mr. Gnaga Hadagali | April and 1          |
| 02      | 2019-20       | NISE - 20           | Prof. P. K. Deshpande<br>Mr. Madhusudhan<br>Mr. Raghavendra Samprati<br>Ms. Pooja Chavan<br>Ms. Shreya Balli            | April and 2          |
| 03      | 2020-21       | NISE - 21           | Prof. P. K. Deshpande<br>Mr. Kishore Parvatikar<br>Mr. Shrishail Talikoti<br>Mr. Anirudha Athani<br>Ms. Anusha kulkarni | April and 3          |

#### 4.4.3 Participation in inter-institute events by students of the program of study (10)

Institute Marks : 10.00

The following tables 4.8, 4.9, and 4.10 show the list of student's participation in inter-institute events.

Table 4.8. Academic Year: 2018-19

| Sl. No | Students Name | Event Name | Level | Award/Prize/Position/Excel Participation | Event Date | Organized by |
|--------|---------------|------------|-------|------------------------------------------|------------|--------------|
|--------|---------------|------------|-------|------------------------------------------|------------|--------------|



|    |                       |                                                                      |          |               |                              |                                                                   |
|----|-----------------------|----------------------------------------------------------------------|----------|---------------|------------------------------|-------------------------------------------------------------------|
| 1. | Abhishek Nagappanavar | Artificial Intelligence Workshop                                     | National | Participation | 02-3-2019<br>to<br>03-3-2019 | Technophilia Solutions, Indian Institute of Technology, Hyderabad |
| 2. | Abhishek Nagappanavar | Spectroscopy and Applications module of Engineering Chemistry course | National | Excelled      | January to April-2018        | QEEE Program, Indian Institute of Technology, Madras              |
| 3. | Prathamesh Kalburgi   | Technical Fest Advitiya '18                                          | National | Participation | 28-9-2018<br>to<br>29-9-2018 | ISE and CSE Department, K.L.E Institute of Technology Hubballi    |

Table 4.9. Academic Year: 2019-20

| Sl. No | Student Name         | Event Name                                         | Level         | Award/Prize/Position/<br>Excel/Recognition<br>Participation | Event Date                     | Organized by                                  |
|--------|----------------------|----------------------------------------------------|---------------|-------------------------------------------------------------|--------------------------------|-----------------------------------------------|
| 1.     | Anusha Kulkarni      | Introduction to Programming using Java             | NA            | Microsoft Technology Associate                              | 12-02-2020                     | Microsoft Corporation                         |
| 2.     | Anusha Kulkarni      | Android App Development                            | National      | Participation                                               | 25-01-2020<br>to<br>26-01-2020 | Ethical Edufabrica Pvt. Ltd., IISC, Bangalore |
| 3.     | Prafulla M. Hiremath | Introduction to Programming using Java             | NA            | Microsoft Technology Associate                              | 12-02-2020                     | Microsoft Corporation                         |
| 4.     | Souharda R. Maishale | Android App Development                            | National      | Participation                                               | 25-01-2020<br>to<br>26-01-2020 | Ethical Edufabrica Pvt. Ltd., IISC, Bangalore |
| 5.     | Omkar Talawar        | The Fundamentals of Digital Marketing              | International | Awarded                                                     | 29-05-2020                     | Google Digital Garage                         |
| 6.     | Atharva A.Kulkarni   | Workshop on Industrial Automation and Industry 4.0 | National      | Participation                                               | 2020                           | BITS Pilani, K.K. Birla Goa Campus            |

Table 4.10. Academic Year: 2020-21

| Sl. No | Students Name | Event Name                                       | Level    | Award/Prize/Position/<br>Excel/Recognition<br>Participation | Event Date | Organized by                             |
|--------|---------------|--------------------------------------------------|----------|-------------------------------------------------------------|------------|------------------------------------------|
| 1.     | Suman Totad   | P2B#151 Python and Machine Learning Fundamentals | National | Participation                                               | 19-11-2021 | Perfect Plan B Elearning Private Limited |

|     |                     |                                                            |          |                          |                                |                                                                                                                                |
|-----|---------------------|------------------------------------------------------------|----------|--------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 2.  | Suman Totad         | GDG DevFest India 2021                                     | National | Participation            | 22-10-2021<br>to<br>24-11-2021 | Google Developer Groups                                                                                                        |
| 3.  | Laxmi Giddappanavar | Webinar on IOT Based Monitoring Systems                    | National | Participation            | 22-05-2021                     | IEEE Information Theory Society (ITS) Bangalore Chapter, AIT Bangalore                                                         |
| 4.  | Sumanth Angadi      | Quiz on General Mathematics                                | National | Participation            | 22-05-2021                     | Department of Applied Science Sagar Institute of Research & Technology Bhopal, Sagar Institute of Research & Technology Bhopal |
| 5.  | Sumanth Angadi      | Advanced Excel Workshop                                    | ---      | Participation            | 21-03-2021                     | Mr. Jatan Shah Microsoft Certified Trainer Founder & CED, JS Academy                                                           |
| 6.  | Sumanth Angadi      | Cyber Sanjivini Competition                                | ---      | Participation            | 07-08-2021                     | Surat City Police in Collaboration with Cyber Suraksha Setu                                                                    |
| 7.  | Pragati Bulla       | TCS ION Career Edge-Young Professional                     | National | Participation            | 02-10-2021<br>to<br>19-10-2021 | Mehul Mehta, Global Delivery Head-TCS ION, Tata Consultancy Services                                                           |
| 8.  | Pragati Bulla       | Quiz on Cyber Security                                     | National | Participation            | 10-08-2021                     | Department of Computer Science and Engineering/Application, Mandsaur University, Mandsaur                                      |
| 9.  | Pragati Bulla       | Technical Fest "Advitiya 21": Fun Tastic                   | National | 3 <sup>rd</sup> Position | 05-07-2021<br>to<br>06-07-2021 | K.L.E Institute of Technology, Hubballi, K.L.E Institute of Technology, Hubballi                                               |
| 10. | Vinutana Devaraddi  | Webinar on Next – generation embedded systems and security | National | Participation            | 24-07-2021                     | IEEE Circuits and Systems(CAS) Society Bangalore Chapter, AIT Bangalore                                                        |
| 11. | Vinutana Devaraddi  | Webinar on IOT Based Monitoring Systems                    | National | Participation            | 22-05-2021                     | IEEE Information Theory Society (ITS) Bangalore Chapter, AIT Bangalore                                                         |
| 12. | Vinutana Devaraddi  | Quiz on Cyber Security                                     | National | Participation            | 10-08-2021                     | Department of Computer Science and Engineering/Application, Mandsaur University, Mandsaur                                      |
| 13. | Pooja S. Ullegaddi  | TCS ION Career Edge-Young Professional                     | National | Participation            | 28-10-2021<br>to<br>11-11-2021 | Mehul Mehta, Global Delivery Head-TCS ION, Tata Consultancy Services                                                           |

|     |                                                         |                                        |          |               |                          |                                                                                                                                |
|-----|---------------------------------------------------------|----------------------------------------|----------|---------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 14. | Omkar K. Talawar                                        | Online project competition Prompt 2021 | State    | Participation | 06-08-2021 to 07-08-2021 | Maharaja Institute of Technology, Mysore                                                                                       |
| 15. | Prajwal K. Trivedi                                      | Quiz on Point the C?                   | National | Participation | 19-10-2021               | JNTUK UCEV ACM Students Branch, JNTUK University College of Engineering Vizianagaram, Vizianagaram                             |
| 16. | Pramod Malali                                           | Quiz on General Mathematics            | National | Participation | 22-05-2021               | Department of Applied Science Sagar Institute of Research & Technology Bhopal, Sagar Institute of Research & Technology Bhopal |
| 17. | Pramod Malali                                           | India IGF 2021 Quiz                    | National | Participation | 2021                     | India Internet Governance Forum (IGF)                                                                                          |
| 18. | Pramod Malali                                           | Online Cyber Patriot Quiz              | National | Participation | 03-11-2021               | Sahyadri College of Engineering and Management Mangalore.                                                                      |
| 19. | Pramod Malali                                           | TCS ION Career Edge-Young Professional | National | Participation | 19-10-2021 to 09-11-2021 | Mehul Mehta, Global Delivery Head-TCS ION, Tata Consultancy Services                                                           |
| 20. | Hrishikesh Deshpande                                    | Learning Python                        | National | Participation | 13-11-2021               | Linked in Learning                                                                                                             |
| 21. | Akshay R. K.                                            | Learning Python                        | National | Participation | 15-11-2021               | Linked in Learning                                                                                                             |
| 22. | Akshay R. K.                                            | Learning Data Analytics                | National | Participation | 16-11-2021               | Linked in Learning                                                                                                             |
| 23. | Vidyashri Mayacharya                                    | 4.0 Tech Online Bootcamp               | National | Participation | 26-07-2021               | Nxtwave                                                                                                                        |
| 24. | Prateek Kadapatti, Kaushal Diwakar, Prathamesh Kalburgi | Smart India Hackathon 2020             | National | Winner        | 01-08-2021 to 04-08-2021 | MHRD                                                                                                                           |

## 5 FACULTY INFORMATION AND CONTRIBUTIONS (200)

Total Marks 149.32

| Sr. No | Name            | PAN No.    | University Degree  | Date of Receiving Degree | Area of Specialization | Research Paper Publications | Ph.D Guidance | Faculty receiving Ph.D during the assessment year | Current Designation | Date (Designated as Prof / Assoc. Prof.) | Initial Date of Joining | Association Type | At present working with the Institution (Yes / No) | Date of Leaving | IS HOD? |
|--------|-----------------|------------|--------------------|--------------------------|------------------------|-----------------------------|---------------|---------------------------------------------------|---------------------|------------------------------------------|-------------------------|------------------|----------------------------------------------------|-----------------|---------|
| 1      | Dr. S. R. Patil | AJOPP0934H | ME/M. Tech and PhD | 10/03/2014               | Image Processing       | 05                          | 04            | 00                                                | Professor           | 03/10/2014                               | 04/05/2001              | Regular          | Yes                                                |                 | Yes     |

|    |                          |            |                    |            |                                        |    |    |    |                     |            |            |         |     |            |    |
|----|--------------------------|------------|--------------------|------------|----------------------------------------|----|----|----|---------------------|------------|------------|---------|-----|------------|----|
| 2  | Dr. S. P. Bangarshetti   | AHFPB5222M | ME/M. Tech and PhD | 13/05/2013 | Image Processing                       | 09 | 03 | 00 | Professor           | 01/03/2014 | 04/05/2001 | Regular | Yes |            | No |
| 3  | Prof. P. V. Kulkarni     | AFJPP7708N | M.E/M.Tech         | 11/06/2002 | Database Systems                       | 00 | 00 | 00 | Associate Professor | 01/10/2005 | 20/03/1998 | Regular | Yes |            | No |
| 4  | Prof. P. S. Puranik      | AJPPP2242K | M.E/M.Tech         | 26/02/2007 | Web Technology                         | 00 | 00 | 00 | Associate Professor | 29/02/2008 | 04/05/2001 | Regular | Yes |            | No |
| 5  | Dr. L. B. Bhajantri      | ACWPL8031E | ME/M. Tech and PhD | 18/06/2015 | Wireless Networks and Communications   | 10 | 04 | 00 | Associate Professor | 01/01/2018 | 04/10/2005 | Regular | Yes |            | No |
| 6  | Prof. R. B. Math         | ARUPM1086F | M.E/M.Tech         | 10/02/2009 | Quality Management                     | 02 | 00 | 00 | Assistant Professor |            | 03/10/2006 | Regular | Yes |            | No |
| 7  | Prof. V. S. Patil        | AUGPP4966Q | M.E/M.Tech         | 09/04/2012 | Image Processing                       | 03 | 00 | 00 | Assistant Professor |            | 02/08/2007 | Regular | Yes |            | No |
| 8  | Prof. S. N. Kugali       | BEGPK5667C | M.E/M.Tech         | 16/12/2008 | Vehicular Adhoc Networks               | 01 | 00 | 00 | Assistant Professor |            | 25/02/2008 | Regular | Yes |            | No |
| 9  | Prof. G. M. Patil        | BNAPP8398G | M.E/M.Tech         | 18/04/2011 | Computer Networks and Communications   | 00 | 00 | 00 | Assistant Professor |            | 06/09/2010 | Regular | Yes |            | No |
| 10 | Dr. B. M. Reshmi         | AECPR2429C | ME/M. Tech and PhD | 02/01/2017 | Medical Image Processing               | 4  | 02 | 01 | Associate Professor | 01/08/2006 | 28/09/1999 | Regular | Yes |            | No |
| 11 | Prof. S. H. Rathod       | AXBPR4804M | M.E/M.Tech         | 05/05/2016 | Networks and Communications            | 00 | 00 | 00 | Assistant Professor |            | 03/09/2010 | Regular | No  | 25/11/2020 | No |
| 12 | Dr A. D. Devangavi       | AHFPD8180L | ME/M. Tech and PhD | 28/07/2018 | Vehicular Adhoc Networks               | 00 | 00 | 00 | Associate Professor | 29/02/2008 | 16/11/2006 | Regular | Yes |            | No |
| 13 | Prof. P. K. Deshpande    | BGNPD4809G | M.E/M.Tech         | 09/04/2012 | Algorithms and Databases               | 00 | 00 | 00 | Assistant Professor |            | 28/09/2011 | Regular | Yes |            | No |
| 14 | Prof. D. I. Kalappanavar | ANPPK9979C | M.E/M.Tech         | 09/04/2012 | Computer Networks                      | 00 | 00 | 00 | Assistant Professor |            | 24/09/2012 | Regular | Yes |            | No |
| 15 | Prof. G. B. Shettar      | DXRPS1355H | M.E/M.Tech         | 08/05/2012 | Software Testing and Computer Networks | 00 | 00 | 00 | Assistant Professor |            | 21/09/2012 | Regular | Yes |            | No |
| 16 | Prof. C. R. Shivanagi    | COYPS3733J | M.E/M.Tech         | 05/04/2013 | Image Processing                       | 00 | 00 | 00 | Assistant Professor |            | 25/09/2012 | Regular | Yes |            | No |
| 17 | Prof. M. R. Patil        | BMKPP2146K | M.E/M.Tech         | 05/04/2013 | Web Technology                         | 00 | 00 | 00 | Assistant Professor |            | 01/01/2015 | Regular | Yes |            | No |

## 5.1 Student-Faculty Ratio (SFR) (20)

Total Marks 16.00

Institute Marks : 16

UG

No. of UG Programs in the Department 

| Information Science and Engineering |                                  |                                                |                                  |                                                |                                  |                                                |
|-------------------------------------|----------------------------------|------------------------------------------------|----------------------------------|------------------------------------------------|----------------------------------|------------------------------------------------|
| Year of Study                       | CAY                              |                                                | CAYm1                            |                                                | CAYm2                            |                                                |
|                                     | (2021-22)                        |                                                | (2020-21)                        |                                                | (2019-20)                        |                                                |
|                                     | Sanction Intake                  | Actual admitted through lateral entry students | Sanction Intake                  | Actual admitted through lateral entry students | Sanction Intake                  | Actual admitted through lateral entry students |
| 2nd Year                            | 90                               | 9                                              | 90                               | 12                                             | 90                               | 12                                             |
| 3rd Year                            | 90                               | 12                                             | 90                               | 12                                             | 90                               | 3                                              |
| 4th Year                            | 90                               | 12                                             | 90                               | 3                                              | 90                               | 12                                             |
| <b>Sub-Total</b>                    | <b>270</b>                       | <b>33</b>                                      | <b>270</b>                       | <b>27</b>                                      | <b>270</b>                       | <b>27</b>                                      |
| <b>Total</b>                        | <b>303</b>                       |                                                | <b>297</b>                       |                                                | <b>297</b>                       |                                                |
| Grand Total                         | <input type="text" value="303"/> |                                                | <input type="text" value="297"/> |                                                | <input type="text" value="297"/> |                                                |

## PG

No. of PG Programs in the Department 

|             |                      |                      |                      |
|-------------|----------------------|----------------------|----------------------|
| Grand Total | <input type="text"/> | <input type="text"/> | <input type="text"/> |
|-------------|----------------------|----------------------|----------------------|

## SFR

No. of UG Programs in the Department No. of PG Programs in the Department 

| Description                                                                        | CAY(2021-22)     |                                   | CAYm1 (2020-21)  |                                   | CAYm2 (2019-20)  |                                   |
|------------------------------------------------------------------------------------|------------------|-----------------------------------|------------------|-----------------------------------|------------------|-----------------------------------|
| Total No. of Students in the Department(S)                                         | <div>303</div>   | Sum total of all (UG+PG) students | <div>297</div>   | Sum total of all (UG+PG) students | <div>297</div>   | Sum total of all (UG+PG) students |
| No. of Faculty in the Department(F)                                                | <div>16</div>    | F1                                | <div>16</div>    | F2                                | <div>17</div>    | F3                                |
| Student Faculty Ratio(SFR)                                                         | <div>18.94</div> | SFR1=S1/F1                        | <div>17.47</div> | SFR2=S2/F2                        | <div>18.56</div> | SFR3=S3/F3                        |
| Average SFR                                                                        | <div>18.32</div> | SFR=(SFR1+SFR2+SFR3)/3            |                  |                                   |                  |                                   |
| F=Total Number of Faculty Members in the Department (excluding first year faculty) |                  |                                   |                  |                                   |                  |                                   |

**Note:** All the faculty whether regular or contractual (except Part-Time), will be considered. The contractual faculty (doing away with the terminology of visiting/adjunct faculty, whatsoever) who have taught for 2 consecutive semesters in the corresponding academic year on full time basis shall be considered for the purpose of calculation in the Faculty Student Ratio. However, following will be ensured in case of contractual faculty:

1. Shall have the AICTE prescribed qualifications and experience.
2. Shall be appointed on full time basis and worked for consecutive two semesters during the particular academic year under consideration.
3. Should have gone through an appropriate process of selection and the records of the same shall be made available to the visiting team during NBA visit

### 5.1.1. Provide the information about the regular and contractual faculty as per the format mentioned below:

|                | Total number of regular faculty in the department | Total number of contractual faculty in the department |
|----------------|---------------------------------------------------|-------------------------------------------------------|
| CAY(2021-22)   | 16                                                | 0                                                     |
| CAYm1(2020-21) | 16                                                | 0                                                     |
| CAYm2(2019-20) | 17                                                | 0                                                     |

Average SFR for three assessment years : 18.32

Assessment SFR : 16

### 5.2 Faculty Cadre Proportion (20)

Total Marks 20.00

Institute Marks : 20.00

| Year            | Professors  |           | Associate Professors |           | Assistant Professors |           |
|-----------------|-------------|-----------|----------------------|-----------|----------------------|-----------|
|                 | Required F1 | Available | Required F2          | Available | Required F3          | Available |
| CAY(2021-22)    | 1.00        | 2.00      | 3.00                 | 3.00      | 10.00                | 11.00     |
| CAYm1(2020-21)  | 1.00        | 2.00      | 3.00                 | 3.00      | 9.00                 | 11.00     |
| CAYm2(2019-20)  | 1.00        | 2.00      | 3.00                 | 3.00      | 9.00                 | 12.00     |
| Average Numbers | 1.00        | 2.00      | 3.00                 | 3.00      | 9.33                 | 11.33     |

Cadre Ratio Marks  $[(AF1 / RF1) + [(AF2 / RF2) * 0.6] + [(AF3 / RF3) * 0.4]] * 10 : 20.00$

### 5.3 Faculty Qualification (20)

Total Marks 13.32

Institute Marks : 13.32

|                | X | Y  | F     | $FQ = 2 \times [(10X + 4Y) / F]$ |
|----------------|---|----|-------|----------------------------------|
| 2021-22(CAY)   | 5 | 11 | 15.00 | 12.53                            |
| 2020-21(CAYm1) | 5 | 11 | 14.00 | 13.43                            |
| 2019-20(CAYm2) | 5 | 12 | 14.00 | 14.00                            |

Average Assessment : 13.32

### 5.4 Faculty Retention (10)

Total Marks 10.00

| Description            | 2020-21 (CAYm1) | 2021-22 (CAY) |
|------------------------|-----------------|---------------|
| No of Faculty Retained | 16              | 16            |
| Total No of Faculty    | 17              | 17            |
| % of Faculty Retained  | 94              | 94            |

Average : 94.00

Assessment Marks : 10.00

### 5.5 Faculty competencies in correlation to Program Specific Criteria (10)

Total Marks 10.00

Institute Marks : 10.00

The faculty members are organized various activities like workshops, FDPs, and SDPs. Also, participated in paper publication in Journal and Conferences, etc., to enhance the knowledge. The knowledge and expertise gained by the faculty members are further used in the development of courses, project guidance, etc. The details of faculty competencies is as shown in table 5.1.

#### A. Faculty Competencies in specialization, research publications, and course developments.

Table 5.1. Faculty Competencies in specialization, research publications, and course developments

| Sl. No. | Faculty Name           | Specialization | Publication Area       | Course Developments                                                                                                                                                                 | Knowledge areas contributed (as per Program Specific Criteria)                                                                      |
|---------|------------------------|----------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| 1       | Dr. S. R. Patil        | Ph. D (CSE)    | Image Processing       | Developed various course modules for UG Programs in ISE like Operating Systems, Logic Design, and Logic Design laboratory.                                                          | Paper Publications, UG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS. |
| 2       | Dr. S. P. Bangarshetti | Ph. D (CSE)    | Image Processing       | Developed various course modules for UG Programs in ISE such as Data Structures, File Information Structures, Computer Organization, Object Oriented Programing, FIS lab, OOPS lab. | Paper Publications, UG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS. |
| 3       | Prof. P. V. Kulkarni   | M. Tech (CSE)  | Data Mining            | Developed various course modules for UG Programs in ISE such as ACA, DBMS, LD, and Data mining.                                                                                     | UG/PG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS.                  |
| 4       | Dr. B. M. Reshmi       | Ph.D(CSE)      | Medical Image Analysis | Developed various course modules for UG Programs in ISE such as DS, Introduction to Unix, USP, Linux kernel programming, distributed capacity system, DS lab, and Unix lab.         | Paper Publications, UG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS. |
| 5       | Prof. P. S. Puranik    | M. Tech (CSE)  | Web Programming        | Developed various course modules for UG Programs in ISE such as OOPS, SE, Java, MIS, Web technology, OOPS lab, WT lab.                                                              | UG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS.                     |

|    |                          |                         |                                          |                                                                                                                                                                                         |                                                                                                                                                                                                                                                       |
|----|--------------------------|-------------------------|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6  | Dr. A. D. Devangavi      | Ph.D (CSE)              | Vehicular Adhoc Networks                 | Developed various course modules for UG Programs in ISE such as OS, NMS, MP LAB, and SA.                                                                                                | Paper Publications, UG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS, UG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS.   |
| 7  | Dr. L. B. Bhajantri      | Ph.D (CSE)              | Distributed Sensor Networks & E-commerce | Developed various course modules for UG Programs in ISE such as Compiler design, DBMS, AI & Expert System, SSM, TFCs, OOMD, OOMD lab, DBMS lab, Big Data and Analytics, and Python lab. | Paper Publications, UG/PG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS, session chair/technical committee member in conferences, editorial/associate board member in various journals. |
| 8  | Prof. R. B. Math         | M. Tech (CSE)           | Management                               | Developed various course modules for UG Programs in ISE such as SS, AI, DBMS, M&E, SS lab.                                                                                              | Paper Publications, UG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS.                                                                                                                   |
| 9  | Prof. V. S. Patil        | M. Tech (CSE)           | Image Processing                         | Developed various course modules for UG Programs in ISE such as FIS, DMS, FIS lab, OS lab.                                                                                              | Paper Publications, UG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS.                                                                                                                   |
| 10 | Prof. S. N. Kugali       | M. Tech (Digital Comm.) | Computer Networks                        | Developed various course modules for UG Programs in ISE such as LD, MP, CN-1, CN-2, USP, C-Pgm, LD lab, USP lab, and Unix lab.                                                          | Paper Publications, UG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS.                                                                                                                   |
| 11 | Prof. S. H. Rathod       | M. Tech (CSE)           | Computer Networks                        | Developed various course modules for UG Programs in ISE such as AGT, CN, CN Lab, OOPS Lab, ADA lab, SS lab.                                                                             | Paper Publications, UG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS.                                                                                                                   |
| 12 | Prof. G. M. Patil        | M. Tech (CSE)           | Web Technologies                         | Developed various course modules for UG Programs in ISE such as MIS, USP, ADA, WT, USP Lab, ADA Lab, WT Lab, and OOMD Lab.                                                              | Paper Publications, UG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS.                                                                                                                   |
| 13 | Prof. P. K. Deshpande    | M.Tech (CSE)            | Database Management System               | Developed various course modules for UG Programs in ISE such as ADA, DBMS, DS, ADA Lab, MP Lab, C++ Lab.                                                                                | Paper Publications, UG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS.                                                                                                                   |
| 14 | Prof. G. B. Shettar      | M.Tech (CSE)            | Software Testing                         | Developed various course modules for UG Programs in ISE such as CN, C# programming & .NET, OOMD lab, DBMS lab.                                                                          | Paper Publications, UG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS.                                                                                                                   |
| 15 | Prof. D. I. Kalappanavar | M.Tech (CSE)            | Network Security                         | Developed various course modules for UG Programs in ISE such as WT, CNS, OOPS, PPL, WT Lab, DS Lab, ADA Lab, SS Lab.                                                                    | Paper Publications, UG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS                                                                                                                    |
| 16 | Prof. C. R. Shivanagi    | M.Tech (CSE)            | Image Processing                         | Developed various course modules for UG Programs in ISE such as CG.                                                                                                                     | Paper Publications, UG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS.                                                                                                                   |



|    |                   |               |                  |                                                                          |                                                                                                                                     |
|----|-------------------|---------------|------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| 17 | Prof. M. R. Patil | M. Tech (CSE) | Web Technologies | Developed various course modules for UG Programs in ISE such as WT, DBMS | Paper Publications, UG projects, organizing FDP/SDP, Seminars/Webinar, and resource persons in various FDPs, subject expert in BoS. |
|----|-------------------|---------------|------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|

### B. Faculty Competencies in faculty development and student development programmes/workshops

**Table 5.2. List of events organized**

| Sl. No. | Academic Year | Name of the Faculty                                                | Name of events organized by the faculty                                     | Level     |
|---------|---------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------|
| 01      | 2018-19       | Prof. P. K. Deshpande<br>Prof. S. N. Kugali                        | Workshop on Enterprise Application Development Using J2EE                   | Institute |
|         |               | Prof. P. K. Deshpande<br>Prof. S. N. Kugali                        | Workshop on Internet of Things(IoT) – from sensors to cloud and back        | Institute |
|         |               | Prof. P. K. Deshpande<br>Prof. S. N. Kugali                        | Student Development Programme on Real Time Development and Deployment Cycle | Institute |
|         |               | Dr. S. R. Patil<br>Dr. L. B. Bhajantri                             | FDP on Research Avenues in Information Technology                           | Institute |
|         |               | Prof. P. K. Deshpande                                              | Pre-Placement Training on Technical Skills                                  | Institute |
|         |               |                                                                    | Pre-Placement Training on Aptitude Skills                                   | Institute |
|         |               |                                                                    | Pre-Placement Training on Verbal skills                                     | Institute |
| 02      | 2019-20       | Dr. B.M. Reshmi<br>Prof. P. K. Deshpande                           | Pre-Placement Training on Technical Skills                                  | State     |
|         |               | Dr. L. B. Bhajantri<br>Prof. V. S. Patil                           | SDP on Advanced Java Programming Towards Industry Approach                  | Institute |
|         |               | Dr. L. B. Bhajantri<br>Prof. V. S. Patil                           | SDP on Data Structures using C                                              | Institute |
|         |               | Dr. B.M. Reshmi<br>Prof. P. K. Deshpande                           | Pre-Placement Training Programme                                            | Institute |
|         |               | Dr. L. B. Bhajantri                                                | FDP on Project Architecture Based Machine Learning                          | National  |
| 03      | 2020-21       | Dr. B.M. Reshmi<br>Prof. P. K. Deshpande                           | Pre-Placement Training Programme on Technical Skills                        | Institute |
|         |               | Dr. B.M. Reshmi<br>Prof. P. K. Deshpande                           | Pre-Placement Training Programme on Aptitude Skills                         | Institute |
|         |               | Dr. L. B. Bhajantri<br>Prof. R. B. Math<br>Prof. Girish B. Shettar | NASSCOM Training programme on Data Science and Analytics under TEQIP-III    | Institute |
|         |               | Dr. Shobha R. Patil<br>Prof. P. K. Deshpande                       | Workshop on ASP. Net and XML                                                | Institute |
|         |               |                                                                    |                                                                             |           |

|  |  |                                                                   |                                                   |           |
|--|--|-------------------------------------------------------------------|---------------------------------------------------|-----------|
|  |  | Dr. Shobha R. Patil<br>Prof. P. K. Deshpande<br>Prof. V. S. Patil | Workshop on Advanced C Programming                | Institute |
|  |  | Dr. B.M. Reshmi<br>Prof. P. K. Deshpande                          | Pre-Placement Training Programme<br>Verbal Skills | Institute |
|  |  | Dr. Shobha R. Patil<br>Prof. P. K. Deshpande<br>Prof. V. S. Patil | Work Shop on Revisiting "C"                       | Institute |

Table 5.3. List of NPTEL courses

| Sl. No. | Academic Year | Name of the Faculty      | Name of MOOCs/NPTEL/Coursera courses                                                          |
|---------|---------------|--------------------------|-----------------------------------------------------------------------------------------------|
| 01      | 2018-19       | ---                      | ---                                                                                           |
| 02      | 2019-20       | Dr. S. R. Patil          | SWAYAM course on Digital Transformation in Teaching Learning Process, 16-3-2020 to 30-3-2020. |
|         |               | Dr. S. P. Banagarashetti | SWAYAM course on Digital transformation in Teaching Learning Process, 16-3-2020 to 30-3-2020. |
|         |               | Prof. P. V. Kulkarni     | SWAYAM course on Digital Transformation in Teaching Learning Process, 6-4-2020 to 22-4-2020.  |
|         |               | Prof. P. S. Puranik      | SWAYAM course on Digital Transformation in Teaching Learning Process, 16-3-2020 to 30-3-2020. |
|         |               | Dr. B. M. Reshmi         | SWAYAM course on Digital Transformation in Teaching Learning Process, 16-3-2020 to 30-3-2020. |
|         |               | Dr. A. D. Devanagavi     | SWAYAM course on Digital Transformation in Teaching Learning Process, 16-3-2020 to 30-3-2020. |
|         |               | Dr. L. B. Bhajantri      | SWAYAM course on Digital Transformation in Teaching Learning Process, 16-3-2020 to 30-3-2020. |
|         |               | Prof. R. B. Math         | NPTEL course on Toyota Production System, Aug. to Oct.2019.                                   |
|         |               | Prof. V. S. Patil        | SWAYAM course on Digital Transformation in Teaching Learning Process, 16-3-2020 to 30-3-2020. |
|         |               | Prof. S. N. Kugali       | SWAYAM course on Digital Transformation in Teaching Learning Process, 16-3-2020 to 30-3-2020. |
|         |               | Miss. G. M. Patil        | SWAYAM course on Digital Transformation in Teaching Learning Process, 16-3-2020 to 30-3-2020. |
|         |               | Sri. P. K. Deshpande     | SWAYAM course on Digital Transformation in Teaching Learning Process, 16-3-2020 to 30-3-2020. |
|         |               | Sri. G. B. Shettar       | SWAYAM course on Digital transformation in Teaching Learning Process, 16-3-2020 to 30-3-2020. |
|         |               | Smt. D. I. Kalappanavar  | SWAYAM course on Digital Transformation in Teaching Learning Process, 16-3-2020 to 30-3-2020. |
|         |               | Miss. C. R. Shivanagi    | SWAYAM course on Digital Transformation in Teaching Learning Process, 16-3-2020 to 30-3-2020. |

|    |         |                         |                                                                                         |
|----|---------|-------------------------|-----------------------------------------------------------------------------------------|
| 03 | 2020-21 | Dr. S. R. Patil         | NPTEL course on NBA Accreditation and Teaching – Learning in Engineering, Jan-Apr 2021  |
|    |         |                         | NPTEL course on Effective Writing, Jan-Feb 2021                                         |
|    |         | Dr. S. P. Bangarashetti | NPTEL course on Python for Data Science, Sept. to Oct. 2020.                            |
|    |         | Prof. P. S. Puranik     | NPTEL course on Python for Data Science, Sept. to Oct. 2020.                            |
|    |         |                         | NPTEL course on Effective Writing, Jan. to Feb.2021                                     |
|    |         | Prof. R. B. Math        | NPTEL course on NBA Accreditation and Teaching – Learning in Engineering, Jan-Apr 2021. |
|    |         |                         | NPTEL course on Quality Design and Control, Jan. to April 2021.                         |
|    |         |                         | NPTEL course on Project Management for Managers, Sept. to Dec. 2020.                    |
|    |         | Dr. L. B. Bhajantri     | NPTEL course on Google Cloud Computing foundations, Sept. to Dec. 2020.                 |
|    |         |                         | NPTEL course on Introduction to Internet of Things, Jan-April 2021                      |
|    |         |                         | NPTEL course on Cloud Computing, Sep-Nov 2020                                           |
|    |         |                         | NPTEL course on NBA Accreditation and Teaching – Learning in Engineering, Jan-Apr 2020  |

## 5.6 Innovations by the Faculty in Teaching and Learning (10)

Total Marks 10.00

Institute Marks : 10.00

The Department of Information Science and Engineering has been incorporating innovative techniques in teaching and learning process. The faculty members are deputed to attend pedagogical trainings or workshops from IIT/IITs/NITs/University/, etc., to create and promote innovation techniques.

The following innovative techniques have been adopted in the teaching learning process.

The use of modern teaching aids like smart boards, LCD Projectors, MS Whiteboard for annotation and sharing PPTs to take online classes, etc.,

Department encourages academic discussions between faculties and students using social media networks like WhatsApp/Telegram/Google Classroom/Online meeting tools, etc.

Department conducts Seminar, Workshops, and Expert Talks every academic year.

The faculty members encourage the students to participate in Group discussions, team-based activities, presentations, etc.

Faculty used variety of online meeting tools/platforms for teaching of courses like Zoom, Cisco Webex, MS Teams, Google Meet, etc.

Faculty members have used discussions as well as sharing of course materials, assignments and quizzes and CIE tests using Google Classroom.

**Live Tutorial classes** - Regular online teaching and learning sessions among faculty and students for course of study through remote login system

**Live streaming seminars/lectures** - Regular streaming of lectures or online seminars/webinars by the faculty to students for course of study through remote login system

**Pre-recorded lectures/tutorials sessions** - Regular circulation of prerecorded video lectures or tutorial sessions by faculty to its students for particular course of study through remote login system, which are disseminated in the college website, student WhatsApp group, Telegram, Google Class room, etc.

Resources available in the college website to promote research-based learning like e-journals, e-books, NPTEL videos, e-database, etc. –

[https://becbgk.edu/ISE/ISE\\_Home.php?id=00gQR5](https://becbgk.edu/ISE/ISE_Home.php?id=00gQR5)

The sample class images and links to pre-recorded videos are shown below:

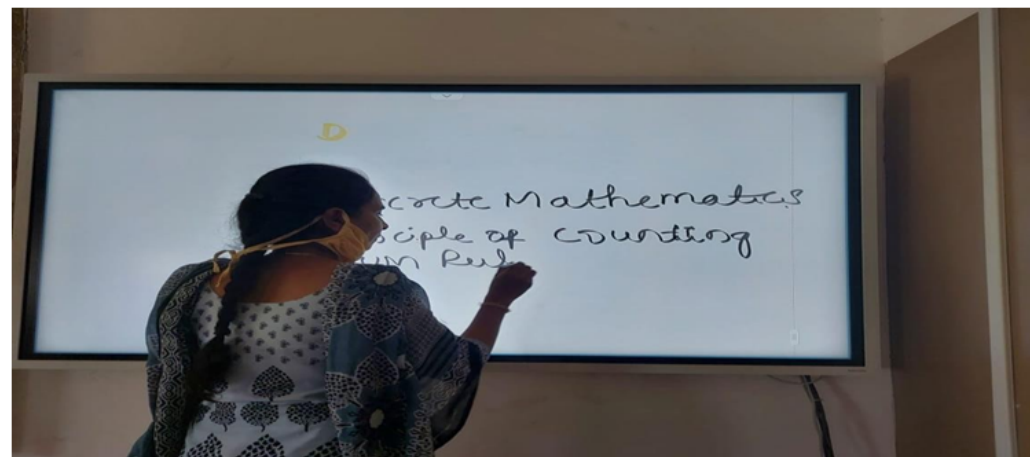
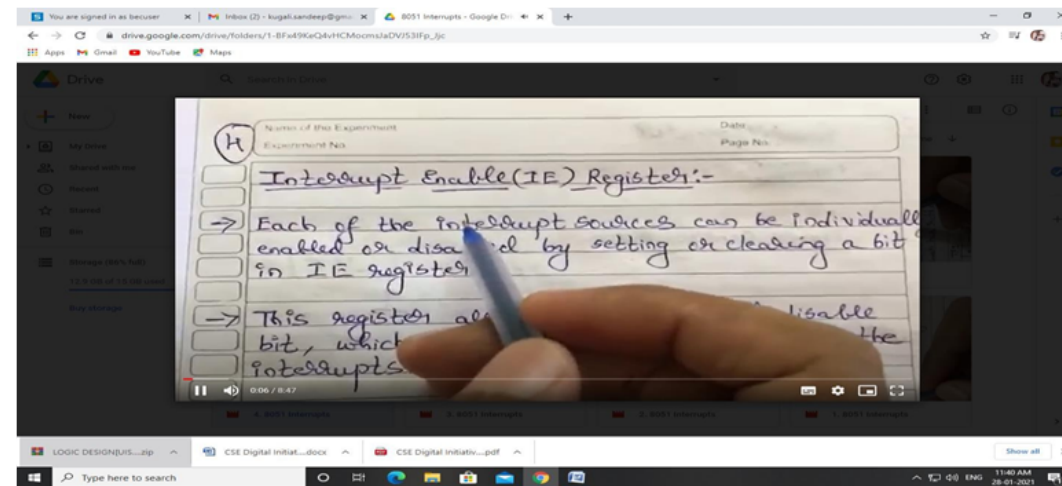


Figure 5.1. List of online class images

YouTube Video Links:

<https://www.youtube.com/watch?v=ZNMCEZjfdlE>

<https://www.youtube.com/watch?v=8-CGiPrMLCg>

<https://www.youtube.com/watch?v=BnWSraHszHM>

<https://www.youtube.com/watch?v=HHuxDa90nqg>

<https://www.youtube.com/watch?v=qRmcEvx1Dt>

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**5.7 Faculty as participants in Faculty development/training activities/STTPs (15)**

Total Marks 15.00

Institute Marks : 15.00

| Name of the faculty                                                                   | Max 5 Per Faculty |                |                |
|---------------------------------------------------------------------------------------|-------------------|----------------|----------------|
|                                                                                       | 2020-21(CAYm1)    | 2019-20(CAYm2) | 2018-19(CAYm3) |
| Dr. S.R.Patil                                                                         | 5.00              | 5.00           | 5.00           |
| Dr. Sadhana.P.B                                                                       | 5.00              | 3.00           | 5.00           |
| Sri. P.V.Kulkarni                                                                     | 5.00              | 5.00           | 5.00           |
| Dr. B.M.Reshmi                                                                        | 3.00              | 3.00           | 3.00           |
| Smt. Preeti Puranik                                                                   | 5.00              | 3.00           | 3.00           |
| Dr. A.D.Devanagavi                                                                    | 5.00              | 5.00           | 5.00           |
| Dr. Lokesh Bhajantri                                                                  | 5.00              | 5.00           | 5.00           |
| Smt. Roopa.B.Math                                                                     | 5.00              | 5.00           | 5.00           |
| Smt. V.S.Patil                                                                        | 0.00              | 5.00           | 0.00           |
| Sri. S.N.Kugali                                                                       | 5.00              | 5.00           | 3.00           |
| Miss. S.H.Rathod                                                                      | 0.00              | 0.00           | 0.00           |
| Miss. G.M.Patil                                                                       | 5.00              | 5.00           | 0.00           |
| Sri. P.K.Deshpande                                                                    | 0.00              | 5.00           | 3.00           |
| Sri. Girish.B.Shettar                                                                 | 5.00              | 5.00           | 5.00           |
| Smt. Deepa.I.K                                                                        | 5.00              | 5.00           | 3.00           |
| Miss. Chetana Shivanagi                                                               | 5.00              | 5.00           | 3.00           |
| Sri. M.R.Patil                                                                        | 3.00              | 5.00           | 0.00           |
| Sum                                                                                   | 66.00             | 74.00          | 53.00          |
| RF = Number of Faculty required to comply with 20:1 Student Faculty Ratios as per 5.1 | 15.00             | 14.00          | 14.00          |
| Assessment [3*(Sum / 0.5RF)]                                                          | 26.40             | 31.71          | 22.71          |

Average assessment over 3 years: 26.94

**5.8 Research and Development (75)**

Total Marks 35.00

**5.8.1 Academic Research (20)**

Institute Marks : 20.00

**A. Research Publication:** The research publications by the faculty members are listed in the table 5.4.

**Table 5.4. List of Consolidated Publications**

| Sl. No. | Academic Year      | Total No. of Publications        |                                     |                    |        |
|---------|--------------------|----------------------------------|-------------------------------------|--------------------|--------|
|         |                    | Journals(National/International) | Conferences(National/International) | Book/Book Chapters | Patent |
| 01      | CAY<br>(2020-21)   | 06                               | 05                                  | 02                 | 00     |
| 02      | CAYm1<br>(2019-20) | 05                               | 10                                  | 00                 | 01     |
| 03      | CAYm2<br>(2018-19) | 05                               | 02                                  | 00                 | 00     |
| Total   |                    | 16                               | 17                                  | 02                 | 01     |

**B. List of paper Publications for the academic year 2020-21****Table 5.5. List of Journal Publications**

| Sl. No. | Name of the Faculty         | Title of the Paper                                                                                          | Title of the Journal                                                                          | International/National | ISSN/ISBN | Vol. No., PP., Year, DOI, Scopus, WoS, DBLP, Google Scholar                                                                                   |
|---------|-----------------------------|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | Dr. S. R. Patil             | A Review on 100-point Activity                                                                              | International Journal of Advanced Research in Science, Communication and Technology (IJARSCT) | International          | 2581-9429 | 8,4,47-50,2020, XX.082020/IJARSCT<br>Google Scholar                                                                                           |
| 2       | Dr.Sadhana P. Bangarashetti | Image Fusion Using Pulse Coupled Network                                                                    | Asian Journal For Convergence in Technology (AJCT)                                            | International          | 2350-1146 | 6, 3, 10-15, 2020,<br><a href="https://doi.org/10.33130/AJCT.2020v06i03.003">https://doi.org/10.33130/AJCT.2020v06i03.003</a> ,Google Scholar |
| 3       | Dr. Bharati M. Reshmi,      | A Novel Method for Automatic Identification of Fovea Location and Its Center in Color Retinal Fundus Images | International Journal of Medical Engineering and Informatics                                  | International          | 1755-0661 | 13, 2, 103-110, Scopus, Google Scholar                                                                                                        |

|   |                          |                                                                                         |                                                                                |               |           |                                                                                                                                                                                  |
|---|--------------------------|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4 | Dr. Lokesh B. Bhajantri, | Context Aware Data Perception in Cognitive Internet of Things: Cognitive Agent Approach | International Journal of Hyperconnectivity and the Internet of Things (IJHIoT) | International | 2473-4365 | 4, 2, 1-18, 2020, <a href="https://10.4018/IJHIoT.2020070101">https://10.4018/IJHIoT.2020070101</a> , DBLP, Google Scholar                                                       |
| 5 | Lokesh B. Bhajantri,     | A Comprehensive Survey on and Information Resource Management in Internet of Things     | Journal of Telecommunications and Information Technology                       | International | 1899-8852 | 4, 27-43, <a href="https://doi.org/10.26636/jtit.2020.145220">https://doi.org/10.26636/jtit.2020.145220</a> , Scopus, Google Scholar                                             |
| 6 | Lokesh B. Bhajantri,     | Behavior and Feedback based Trust Computation framework for Cloud Computing             | Journal of King Saud University - Computer and Information Sciences            | International | --        | 1-12, 2020, <a href="https://doi.org/10.1016/j.jksuci.2020.12.003">https://doi.org/10.1016/j.jksuci.2020.12.003</a> Scopus, Web of Science, Google Scholar, Impact factor-13.473 |

Table 5.6. List of Conference Publications

| Sl. No. | Name of the Faculty          | Title of the Paper                                                          | Title of the Conference                                                                             | International/National | ISSN/ISBN         | Vol. No., PP., Year, DOI, Scopus, WoS |
|---------|------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------|-------------------|---------------------------------------|
| 1       | Dr. Sadhana P. Bangarashetti | Secured Cloud Storage System Using Auto Passkey Generation                  | International Conference on Deep Learning, Computing and Intelligence - 2021                        | International          | --                | 2021, Scopus                          |
| 2       | Dr. Sadhana P. Bangarashetti | Detection and Classification of Electronic Nose System                      | 2021 5 <sup>th</sup> International Conference on Intelligent Computing and Control Systems (ICICCS) | International          | 978-1-6654-1272-8 | 1- 4, 2021, Scopus                    |
| 3       | Dr. Bharati M. Reshmi        | A review on automatic detection of diabetic retinopathy using fundus images | 2 <sup>nd</sup> International conference on adaptive computational intelligence-2020                | International          | --                | 2021, Scopus                          |



|   |                         |                                                                                                  |                                                                                                                    |               |                   |                   |
|---|-------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------------|-------------------|-------------------|
| 4 | Dr. Lokesh B. Bhajantri | A Comprehensive Survey: Towards Providing Personal Safety Services in Emergency Situations       | International Conference on Emerging Technologies in Data Mining and Information Security (Springer)               | International | 978-981-15-9774-9 | 661-670, Scopus   |
| 5 | Dr. Lokesh B. Bhajantri | Internet of Things Based Smart Ring System for Human Safety Services during Emergency Situations | International Conference on Computer Networks and Inventive Communication Technologies (ICCNCT - 2020), (Springer) | International | 978-981-15-9647-6 | 1127-1146, Scopus |

Table 5.7. List of Books/ Book Chapters

| Sl. No. | Name of the Faculty | Title of the Book                                                                                  | Title of the Book Chapter                                                                                                             | International/ National | ISSN/ISBN     | Vol. No., PP., Year, DOI, Scopus, WoS                                                                                    |
|---------|---------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------|--------------------------------------------------------------------------------------------------------------------------|
| 1       | Lokesh B. Bhajantri | Research Anthology on Artificial Intelligence Applications in Security, IGI Global Publisher       | A Comprehensive Review of Access Control Mechanism based on Attribute Based Encryption Scheme for Cloud Computing                     | International           | 9781799877059 | 4. 899-921, DOI: 10.4018/978-1-7998-7705-9.ch042, Google Scholar                                                         |
| 2       | Lokesh B. Bhajantri | Machine Learning and Deep Learning Techniques in Wireless and Mobile Networking Systems, CRC Press | A Model for Evaluating Trustworthiness Using Behaviour and Recommendation in Cloud Computing Integrated with Wireless Sensor Networks | International           | 9781003107477 | 1-22, <a href="https://doi.org/10.1201/9781003107477">https://doi.org/10.1201/9781003107477</a> , Scopus, Google Scholar |

## C. List of paper Publications for the academic year 2019-20

Table 5.8. List of Journal Publications

| Sl. No. | Name of the Faculty      | Title of the Paper              | Title of the Journal                                         | International/ National | ISSN/ISBN   | Vol. No., PP., Year, DOI, Scopus, WoS, DBLP, Google Scholar |
|---------|--------------------------|---------------------------------|--------------------------------------------------------------|-------------------------|-------------|-------------------------------------------------------------|
| 1       | Sadhana P. Bangarashetti | Laplacian based Image Mosaicing | International Journal of Engineering and Advanced Technology | International           | 2249 – 8958 | 9, 4, 791-794, 10.35940/ijeat.D7644.049420, 2020, Scopus    |

|   |                          |                                                                                                                   |                                                                                   |               |           |                                                                                                                              |
|---|--------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------|-----------|------------------------------------------------------------------------------------------------------------------------------|
| 2 | Sadhana P. Bangarashetti | Image Registration with Conditional Adversarial Networks                                                          | International Journal of Innovative Technology and Exploring Engineering          | International | 2278-3075 | 9, 6, 278-281, 10.35940/ijitee.E2901.049620 2020, Scopus                                                                     |
| 3 | Bharati Reshmi           | A review on automatic identification of fovea in retinal fundus images                                            | International Journal of Medical Engineering and Informatics                      | International | 1755-0661 | 12, 2, 169 – 179, 2020, 10.1504/IJMEI.2020.106900, Scopus, Google Scholar                                                    |
| 4 | Lokesh Bhajantri         | A Comprehensive Review of Access Control Mechanism based on Attribute Based Encryption Scheme for Cloud Computing | International Journal of Advanced Pervasive and Ubiquitous Computing & IGI Global | International | 1937-9668 | 11, 3, 33-52, 2019, <a href="https://10.4018/IJAPUC.2019070103">https://10.4018/IJAPUC.2019070103</a> , DBLP, Google Scholar |
| 5 | Sandeep Kugali           | Vehicular ADHOC Network (VANET):-A Brief Knowledge                                                                | International Journal of Engineering Research & Technology (IJERT)                | International | 2278-0181 | 9, 6, 1-6, 2020, <a href="https://10.17577/IJERTV9IS060784">https://10.17577/IJERTV9IS060784</a> , Google Scholar            |

Table 5.9. List of Conference Publications

| Sl. No. | Name of the Faculty | Title of the Paper                                                                                 | Title of the Conference                                                                                                                     | International/ National | ISSN/ISBN         | Vol. No., PP., Year, DOI, Scopus, WoS |
|---------|---------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------|---------------------------------------|
| 1       | Shobha. R. Patil    | Enhancement of feature extraction in image quality                                                 | Third International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC 2019) SCAD Institute of Technology, TN, India | International           | 978-1-7281-4365-1 | 490-495, 2019, Scopus                 |
| 2       | Shobha R. Patil     | Detection of Nuclei Cell Histopathological Images of Uterine Cancer: Adenocarcinoma of Endometrial | 4 <sup>th</sup> International Conference on Trends in Electronics and Informatics                                                           | International           | 978-1-7281-5518-0 | 880-885, 2020, Scopus                 |

|   |                          |                                                                              |                                                                                                                        |               |                   |                                                     |
|---|--------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|---------------|-------------------|-----------------------------------------------------|
| 3 | Sadhana Bangarashetti    | A Framework for image selection for image fusion using crowd sourced data    | 2019 International Conference on Advances in Information Technology (ICAIT)                                            | International | 978-1-7281-3241-9 | 167-173, 2019, Scopus                               |
| 4 | Sadhana P. Bangarashetti | Image Mosaicing Using Homography Estimation                                  | 2020 IEEE International Conference for Innovation Technology (INOCON)                                                  | International | 978-1-7281-9744-9 | 130-136, 2020, Scopus                               |
| 5 | Sadhana P. Bangarashetti | All in One Card: A Knowledgeable Tool                                        | IEEE Third International Conference on "Multimedia Processing, Communications and Information Technology" - MPCIT 2020 | International | --                | 1-6, 2020, Scopus                                   |
| 6 | Sadhana Bangarashetti    | Blockchain Technology in Healthcare                                          | IEEE Third International Conference on "Multimedia Processing, Communications and Information Technology" - MPCIT 2020 | International | --                | 2020, Scopus                                        |
| 7 | Sadhana P. Bangarashetti | IoT based Vehicle Health Monitoring System                                   | Eleventh International Conference on Advances in Computer Science                                                      | International | 2395-5295         | 191-196, 2020, Scopus                               |
| 8 | Bharati M. Reshmi        | Automatic detection and grading of diabetic maculopathy using fundus images  | International Conference on Computational Intelligence and Data Science (ICCIDS 2019), Elsevier premedia               | International | 1877-0509         | 57-66, 2020, Scopus                                 |
| 9 | Lokesh B. Bhajantri      | A survey of Cloud Computing Security Challenges, Issues, and Countermeasures | 3rd International conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC 2019), Springer            | International | 978-1-7281-4365-1 | 1-6, 10.1109/I-SMAC47947.2019.9032545, 2019, Scopus |

|    |                     |                                                                                               |                                                                                              |               |    |                       |
|----|---------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------|----|-----------------------|
| 10 | Lokesh B. Bhajantri | Cluster Based Data Aggregation in Distributed Sensor Networks: A Bayesian Classifier Approach | International Conference on Evolutionary Computing and Mobile Sustainable Networks, Springer | International | -- | 896-904, 2020, Scopus |
|----|---------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------|----|-----------------------|

Table 5.10. List of Patents

| Sl. No. | Name of the Faculty/Inventor | Title of the Patent                                    | Application Number | Ref. and Date       | Status (Applied/Published/Awarded) |
|---------|------------------------------|--------------------------------------------------------|--------------------|---------------------|------------------------------------|
| 1.      | Dr. Lokesh B. Bhajantri      | A Wearable Safety System for Real Time Human Emergency | 202041023818A      | India<br>20-06-2020 | Published                          |

## D. List of paper Publications for the academic year 2018-19

Table 5.11. List of Journal Publications

| Sl. No. | Name of the Faculty  | Title of the Paper                                                          | Title of the Journal                                                                                        | International/ National | ISSN/ISBN | Vol. No., PP., Year, DOI, Scopus, WoS, DBLP, Google Scholar       |
|---------|----------------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------|-----------|-------------------------------------------------------------------|
| 1       | Lokesh B. Bhajantri  | A Comprehensive Survey on Data Aggregation in Wireless Sensor Networks      | International Journal of Computer Sciences and Engineering                                                  | International           | 2347-2693 | 6,7, 817-822,2018, Google Scholar                                 |
| 2       | Lokesh B. Bhajantri, | Cognitive Agent Based Data Synchronization in Ubiquitous Networks: A Survey | International Journal of Advanced Pervasive and Ubiquitous Computing & IGI Global                           | International           | 1937-9668 | 10,2, 1-17, 2018, 10.4018/IJAPUC.2018040101, DBLP, Google Scholar |
| 3       | Lokesh B. Bhajantri, | A Survey on Data Perception in Cognitive Internet of Things                 | Journal of Telecommunications and Information Technology & National Institute of Telecommunications, Poland | International           | 1899-8852 | 3, 75-86, 2019, 10.26636/jtit.2019.131419, Scopus, Google Scholar |
| 4       | Roopa B. Math        | Role of human anthropometry in manufacturing process optimisation           | International Journal of Business and Systems Research, Inderscience Enterprises Ltd.                       | International           | 1751-2018 | 13, 2, 2019, Google Scholar                                       |

|   |               |                                                                                                             |                                                                                       |               |           |                                                                      |
|---|---------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------|-----------|----------------------------------------------------------------------|
| 5 | Roopa B. Math | Application of Taguchi based Six Sigma method to reduce defects in green sand casting process: a case study | International Journal of Business and Systems Research, Inderscience Enterprises Ltd. | International | 1751-2018 | 13, 2, 2019,<br>10.1504/IJBSR.2019.098666,<br>Scopus, Google Scholar |
|---|---------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------|-----------|----------------------------------------------------------------------|

Table 5.12. List of Conference Publications

| Sl. No. | Name of the Faculty | Title of the Paper                                                                             | Title of the Conference                                                       | International/ National | ISSN/ISBN         | Vol. No., PP., Year, DOI, Scopus, WoS                |
|---------|---------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------|-------------------|------------------------------------------------------|
| 1       | Lokesh B. Bhajantri | Trust Computation Framework based on User Behavior and Recommendation in Cloud Computing       | IEEE International Conference on Advanced Computing and Communication Systems | International           | 978-1-5386-9533-3 | 1-6, 2019,<br>10.1109/ICACCS.2019.8728484,<br>Scopus |
| 2       | Reshmi B.M.         | A Comprehensive Review on Automatic Diagnosis of Diabetic Maculopathy in Retinal Fundus Images | 4 <sup>th</sup> International Symposium SIRS 2018, Springer Publications      | International           | 978-981-13-5757-2 | 410-420, 2018, Scopus                                |

**E. Ph.D Guidance**

The following faculty members have been guiding the students under Visvesvaraiah Technological University (VTU), Belagavi, as shown in table 5.13.

Table 5.13. Ph.D guided/guiding during the assessment periods

| Sl. No. | Name of the Faculty     | Assessment Periods |                |                |                | University                                             |
|---------|-------------------------|--------------------|----------------|----------------|----------------|--------------------------------------------------------|
|         |                         | CAY<br>2020-21     | CAY<br>2019-20 | CAY<br>2018-19 | CAY<br>2017-18 |                                                        |
| 01      | Dr. S. R. Patil         | 04                 | 04             | 04             | 04             | Visvesvaraiah Technological University (VTU), Belagavi |
| 02      | Dr. S. P. Bangarashetti | 03                 | 03             | 03             | 03             | Visvesvaraiah Technological University (VTU), Belagavi |
| 03      | Dr. B. M. Reshmi        | 02                 | 02             | 02             | 02             | Visvesvaraiah Technological University (VTU), Belagavi |
| 04      | Dr. L. B. Bhajantri     | 04                 | 04             | 05             | 05             | Visvesvaraiah Technological University (VTU), Belagavi |

**F. Ph.D Awarded/Pursuing**

The following faculties awarded and pursuing Ph.D during the assessment periods is as shown in table 5.14.

Table 5.14. Ph.D awarded during the assessment period

| Sl. No. | Name of the Faculty | Assessment Periods |                  |                  |                  | University |
|---------|---------------------|--------------------|------------------|------------------|------------------|------------|
|         |                     | CAY<br>2020-21     | CAYm1<br>2019-20 | CAYm2<br>2018-19 | CAYm3<br>2017-18 |            |

|    |                     |    |    |    |          |                                                         |
|----|---------------------|----|----|----|----------|---------------------------------------------------------|
| 01 | Dr. A. D. Devangavi | -- | -- | -- | Awarded  | Rabindranath Tagore University, MP, India.              |
| 02 | Prof. V. S. Patil   | -- | -- | -- | Pursuing | Visvesvaraiiah Technological University (VTU), Belagavi |

### 5.8.2 Sponsored Research (20)

Institute Marks : 0.00

#### 2020-21 (CAYm1)

| Project Title | Duration | Funding Agency | Amount(in Rupees)     |
|---------------|----------|----------------|-----------------------|
| --            | 00       | --             | 0.00                  |
|               |          |                | Total Amount(X): 0.00 |

#### 2019-20 (CAYm2)

| Project Title | Duration | Funding Agency | Amount(in Rupees)     |
|---------------|----------|----------------|-----------------------|
| --            | 00       | --             | 0.00                  |
|               |          |                | Total Amount(Y): 0.00 |

#### 2018-19 (CAYm3)

| Project Title | Duration | Funding Agency | Amount(in Rupees)     |
|---------------|----------|----------------|-----------------------|
| --            | 00       | --             | 0.00                  |
|               |          |                | Total Amount(Z): 0.00 |

Cumulative Amount(X + Y + Z) = 0.00

### 5.8.3 Development activities (15)

Institute Marks : 15.00


#### A. Product Development

Institute has established MoU with Karnataka Biotechnology and Information Technology Services (KBITS), GoK. As per the MoU, every year 10 best faculty/students ideas will be selected by KBITS and up to Rs. 3 Lakhs will be funded to convert idea into product. List of the ideas selected for funding is given in below table 5.15.

Table 5.15. List of Product Projects

| Sl. No. | Name of the students              | Title of the Project              | Description                                                                                                                                                                   |
|---------|-----------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01      | Aishwarya Mokhashi - 2BA15IS011   | Safer Riding through Smart Helmet | Nowadays even though govt is making strict action for the security of two wheelers traveler that is wearing helmet, but many people are not following the rules and hence are |
| 02      | Usha R. Tukappanavar - 2BA15IS080 |                                   |                                                                                                                                                                               |
| 03      | Veena Karalatti - 2BA15IS085      |                                   |                                                                                                                                                                               |

|                                                                                    |                             |  |                                                                                         |
|------------------------------------------------------------------------------------|-----------------------------|--|-----------------------------------------------------------------------------------------|
| 04                                                                                 | Rahul M. Sutar - 2BA16IS411 |  | risking their lives where the two wheeler vehicle can only start on wearing the helmet. |
|  |                             |  |                                                                                         |

| Sl. No.                                                                             | Name of the students             | Title of the Project | Description                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------|----------------------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01                                                                                  | Aishwarya B Kovalli - 2BA15IS005 | Smart Vehicle        | <p>The project "Smart Vehicle" implements the application of fingerprint identification (Biometric) in the vehicle ignition systems and the GPS location of the vehicle. Using this project, the access to a vehicle can be controlled using finger prints. For this an embedded finger print module is used in which the thumb finger prints of the owner and his other authorized users will be fed into the embedded module.</p> |
| 02                                                                                  | Bhagyashri V Pawar - 2BA15IS021  |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 03                                                                                  | Ganga A Hadagali - 2BA15IS026    |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 04                                                                                  | Madhu Dodamani - 2BA15IS035      |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|  |                                  |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## B. Research Laboratory

The department of Information Science and Engineering has been recognized as a research centre by Visvesvaraiha Technological University (VTU), Belagavi, Karnataka, India, from the academic year 2019-20. The following table 5.16 shows the research scholars details.

Table 5.16. List of research scholars

| Sl.No. | Name of the Research Scholar         | Name of Guide           | Type       | University    |
|--------|--------------------------------------|-------------------------|------------|---------------|
| 01     | Rajkumar C. Sikkeri, TKIET, Kolhapur | Dr. S. R. Patil         | Part- Time | VTU, Belagavi |
| 02     | Sudha V. Salake, GIT, Belagavi       | Dr. S. P. Bangarashetti | Part- Time | VTU, Belagavi |
|        | Raghavendra Jadhav, GIT, Belagavi    |                         | Part- Time | VTU, Belagavi |
| 03     | Priyanka Tuppad, BGMIT, Mudhol       | Dr. B. M. Reshmi        | Part- Time | VTU, Belagavi |
| 04     | Girish B. Shettar, BEC, Bagalkot     | Dr. A. D. Devanagavi    | Part- Time | VTU, Belagavi |
|        | Vinayak Telasang, BGMIT, Mudhol      |                         | Part- Time | VTU, Belagavi |

|    |                                    |                     |            |               |
|----|------------------------------------|---------------------|------------|---------------|
| 05 | Basavarak G. Kumbar, BGMIT, Mudhol | Dr. L. B. Bhajantri | Part- Time | VTU, Belagavi |
|----|------------------------------------|---------------------|------------|---------------|

The lists of facilities are available in research laboratory is as shown in table 5.17.

**Table 5.17. List of facilities**

| Sl. No. | Particulars                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Quantity |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 01      | HP desktop computers, Intel CORE I5, 6500 CPU@3.2 GHZ, 8 GB RAM, 1 TB HDD, 17" LCD Monitor, Keyboard, and Mouse.                                                                                                                                                                                                                                                                                                                                                                                                                                          | 30       |
| 02      | Interactive white board with projector.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 01       |
| 03      | HP Laser Jet 2020 printer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 01       |
| 04      | List of legal software's: Windows 7, Windows 8, Windows 8.1, Windows 10, Visual Studio 2010/12, .Net Frame work, Microsoft Office 2012, Quick Heal Antivirus, Windows Server 2012/16                                                                                                                                                                                                                                                                                                                                                                      | 04       |
| 04      | Additional Facilities:Open Source Software's: VP Suite, OpenSuse, Oracle 10G,Java SE Development Kit, Turbo C++, MatLab Octave, Wireshark, NS2, Max Plus2, Fedora 24, Ubuntu, Selenium IDE, Keil Micro-Vision4 open source software tool kit etc.<br><br>Other hardware components: 20 KVA and 10 KVA Online UPS System, IOT kits, Micro-controller 8051, MSP 430 kit.<br><br>100 mbps Jio and 200 mbps Internet facility, and Wi-Fi Facility.<br><br>Other Online Course materials and library facilities: NPTEL materials and Central library facility. | 04       |
| 05      | IoT kit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 05       |

The lists of centralized facilities are available in research laboratory is as shown in table 5.18.

**Table 5.18. Centralized Facilities for Research Activities**

| Sl. No. | Particulars                                               | Quantity/Facility |
|---------|-----------------------------------------------------------|-------------------|
| 01      | Number of National Journals                               | 12                |
| 02      | Number of International Journals                          | 800               |
| 03      | No. of Titles Pertaining to Proposed Research Activities  | 100               |
| 04      | No. of Volumes Pertaining to Proposed Research Activities | 250               |
| 05      | Audio-Video Facility in the Department                    | Yes               |
| 06      | Internet Facility in the Department                       | Yes               |
| 07      | Reprographic Facility                                     | Yes               |
| 08      | Documents Scanning Facility                               | Yes               |

### C. Instructional materials

The department faculty members have prepared the instructional materials for their respective subjects. The instructional materials are communicated to students in WhatsApp group and Google Classroom. The instructional materials are published on the institutional website ([https://becbgk.edu/ISE/ISE\\_Home.php?id=00gQR5](https://becbgk.edu/ISE/ISE_Home.php?id=00gQR5)) for reference by the students.

### D. Working Models/Charts/Monograms

The department faculty members have prepared the charts for their respective subjects. The charts are disseminated in the respective department laboratories. Sample Chart pictures are provided below:





# BASAVESHWAR ENGINEERING COLLEGE, (AUTONOMOUS)

[Government Aided Institution and Affiliated to Visvesvaraya Technological University, Belagavi, NAAC 'A' Grade] Accreditation]

**BAGALKOT - 587103**

## DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

### Common Data Structure Operations

| Data Structure     | Time Complexity   |                   |                   |                   |                   |                   |                   |                   | Space Complexity    |
|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|
|                    | Average           |                   |                   |                   | Worst             |                   |                   |                   | Worst               |
|                    | Access            | Search            | Insertion         | Deletion          | Access            | Search            | Insertion         | Deletion          |                     |
| Array              | $\theta(1)$       | $\theta(n)$       | $\theta(n)$       | $\theta(n)$       | $\theta(1)$       | $\theta(n)$       | $\theta(n)$       | $\theta(n)$       | $\theta(n)$         |
| Stack              | $\theta(n)$       | $\theta(n)$       | $\theta(1)$       | $\theta(1)$       | $\theta(n)$       | $\theta(n)$       | $\theta(1)$       | $\theta(1)$       | $\theta(n)$         |
| Queue              | $\theta(n)$       | $\theta(n)$       | $\theta(1)$       | $\theta(1)$       | $\theta(n)$       | $\theta(n)$       | $\theta(1)$       | $\theta(1)$       | $\theta(n)$         |
| Singly-Linked List | $\theta(n)$       | $\theta(n)$       | $\theta(1)$       | $\theta(1)$       | $\theta(n)$       | $\theta(n)$       | $\theta(1)$       | $\theta(1)$       | $\theta(n)$         |
| Doubly-Linked List | $\theta(n)$       | $\theta(n)$       | $\theta(1)$       | $\theta(1)$       | $\theta(n)$       | $\theta(n)$       | $\theta(1)$       | $\theta(1)$       | $\theta(n)$         |
| Skip List          | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(n)$       | $\theta(n)$       | $\theta(n)$       | $\theta(n)$       | $\theta(n \log(n))$ |
| Hash Table         | N/A               | $\theta(1)$       | $\theta(1)$       | $\theta(1)$       | N/A               | $\theta(n)$       | $\theta(n)$       | $\theta(n)$       | $\theta(n)$         |
| Binary Search Tree | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(n)$       | $\theta(n)$       | $\theta(n)$       | $\theta(n)$       | $\theta(n)$         |
| Cartesian Tree     | N/A               | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | N/A               | $\theta(n)$       | $\theta(n)$       | $\theta(n)$       | $\theta(n)$         |
| B-Tree             | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(n)$         |
| Red-Black Tree     | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(n)$         |
| Splay Tree         | N/A               | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | N/A               | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(n)$         |
| AVL Tree           | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(n)$         |
| KD Tree            | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(\log(n))$ | $\theta(n)$       | $\theta(n)$       | $\theta(n)$       | $\theta(n)$       | $\theta(n)$         |



B.V.V.S

# BASAVESHWAR ENGINEERING COLLEGE, (AUTONOMOUS)

[Government Aided Institution and Affiliated to Visvesvaraya Technological University, Belagavi, NAAC 'A' Grade] Accreditation

**BAGALKOT - 587103**

## DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

### Array Sorting Algorithms

| Algorithm      | Time Complexity     |                        |                   | Space Complexity |
|----------------|---------------------|------------------------|-------------------|------------------|
|                | Best                | Average                | Worst             | Worst            |
| Quicksort      | $\Omega(n \log(n))$ | $\Theta(n \log(n))$    | $O(n^2)$          | $O(\log(n))$     |
| Mergesort      | $\Omega(n \log(n))$ | $\Theta(n \log(n))$    | $O(n \log(n))$    | $O(n)$           |
| Timsort        | $\Omega(n)$         | $\Theta(n \log(n))$    | $O(n \log(n))$    | $O(n)$           |
| Heapsort       | $\Omega(n \log(n))$ | $\Theta(n \log(n))$    | $O(n \log(n))$    | $O(1)$           |
| Bubble Sort    | $\Omega(n)$         | $\Theta(n^2)$          | $O(n^2)$          | $O(1)$           |
| Insertion Sort | $\Omega(n)$         | $\Theta(n^2)$          | $O(n^2)$          | $O(1)$           |
| Selection Sort | $\Omega(n^2)$       | $\Theta(n^2)$          | $O(n^2)$          | $O(1)$           |
| Tree Sort      | $\Omega(n \log(n))$ | $\Theta(n \log(n))$    | $O(n^2)$          | $O(n)$           |
| Shell Sort     | $\Omega(n \log(n))$ | $\Theta(n(\log(n))^2)$ | $O(n(\log(n))^2)$ | $O(1)$           |
| Bucket Sort    | $\Omega(n+k)$       | $\Theta(n+k)$          | $O(n^2)$          | $O(n)$           |
| Radix Sort     | $\Omega(nk)$        | $\Theta(nk)$           | $O(nk)$           | $O(n+k)$         |
| Counting Sort  | $\Omega(n+k)$       | $\Theta(n+k)$          | $O(n+k)$          | $O(k)$           |
| Cubesort       | $\Omega(n)$         | $\Theta(n \log(n))$    | $O(n \log(n))$    | $O(n)$           |



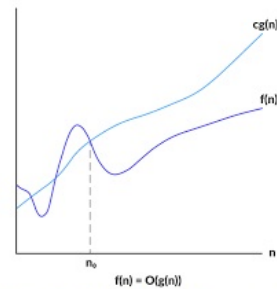
**BASAVESHWAR ENGINEERING COLLEGE, (AUTONOMOUS)**

[Government Aided Institution and Affiliated to Visvesvaraya Technological University, Belagavi, NAAC 'A' Grade] Accreditation]

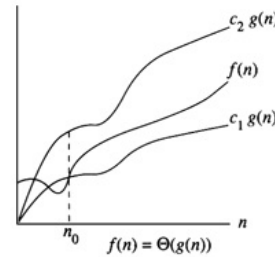
**BAGALKOT - 587103**

**DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING**

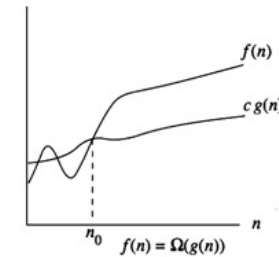
## Algorithms Performance



**Big-O Notation (O-notation)**



**Theta Notation (Θ-notation)**



**Omega Notation (Ω-notation)**



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**BAGALKOT - 587103**

**DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING**

## Software Testing Methods

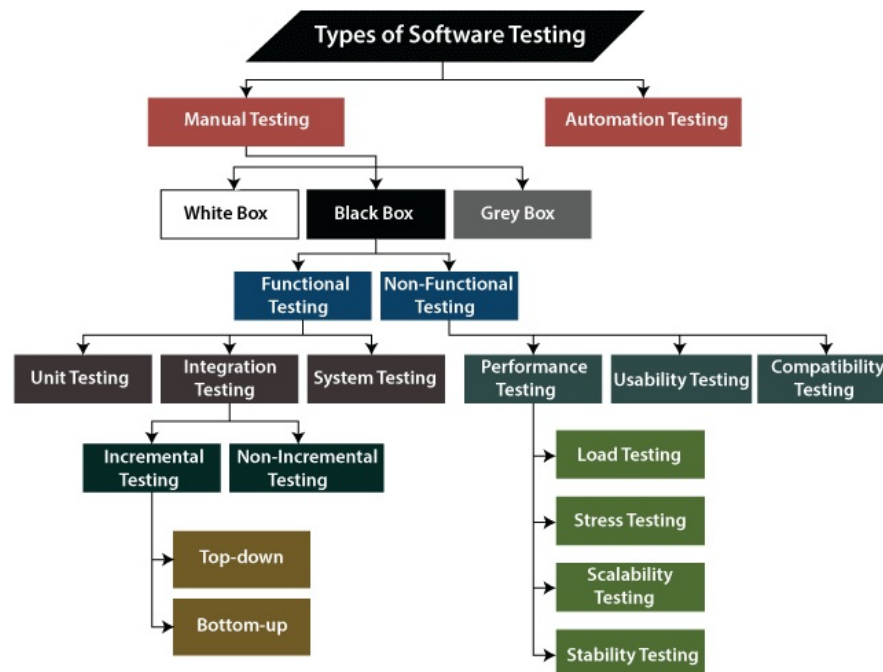


Figure 5.2. List of charts

**2020-21 (CAYm1)**

| Project Title | Duration | Funding Agency | Amount(in Rupees)     |
|---------------|----------|----------------|-----------------------|
| --            | 00       | --             | 0.00                  |
|               |          |                | Total Amount(X): 0.00 |

**2019-20 (CAYm2)**

| Project Title | Duration | Funding Agency | Amount(in Rupees)     |
|---------------|----------|----------------|-----------------------|
| --            | 00       | --             | 0.00                  |
|               |          |                | Total Amount(Y): 0.00 |

**2018-19 (CAYm3)**

| Project Title | Duration | Funding Agency | Amount(in Rupees)     |
|---------------|----------|----------------|-----------------------|
| --            | 00       | --             | 0.00                  |
|               |          |                | Total Amount(Z): 0.00 |

Cumulative Amount(X + Y + Z) = 0.00

**5.9 Faculty Performance Appraisal and Development System (FPADS) (10)**

Total Marks 10.00

Institute Marks : 10.00

**Expected tasks of a faculty member are:**

Provide up-to-date reports involving teaching activities and student advising as assigned by the department.

Be responsible for course development and participate in curriculum and program development.

Fulfil all instructional and advising responsibilities as specified in the policies and procedures.

Participate in scholarly and research activities which enhance their professional development and contribute to their discipline.

Serve as appropriate in the department, college and university committees.

Provide professional services to the University and community.

|                                         |   |                                                                                      |
|-----------------------------------------|---|--------------------------------------------------------------------------------------|
| Feedback collected for all courses      | : | YES                                                                                  |
| Specify the feedback collection process | : | Feedback is collected through an online process system at the end of every semester. |
| Percentage of students participating    | : | 100%                                                                                 |

The department has adopted Academic Performance Index (API) appraisal of UGC. Based on the scores in each criteria, the performance of faculty is mentioned and regulated. Faculty performance appraisal information is given in the below table:

**Table 5.17. Faculty performance appraisal information**

| Name of the Faculty      | 2018-19 | 2019-20 | 2020-21 |
|--------------------------|---------|---------|---------|
| Dr. S. R. Patil          | 250     | 292     | 292     |
| Dr. S. P. Bangarashetti  | 255     | 280     | 240     |
| Prof. P. V. Kulkarni     | 180     | 180     | 180     |
| Dr. B. M. Reshmi         | 190     | 200     | 200     |
| Dr. A. D. Devangavi      | 200     | 210     | 210     |
| Prof. P. S. Puranik      | 110     | 125     | 113     |
| Dr. L. B. Bhajantri      | 335     | 425     | 435     |
| Prof. R. B. Math         | 139     | 139     | 139     |
| Prof. V. S. Patil        | 144     | 144     | 144     |
| Prof. G. M. Patil        | 139     | 134     | 134     |
| Prof. P. K. Deshpande    | 138     | 140     | 138     |
| Prof. S. N. Kugali       | 144     | 144     | 154     |
| Prof. C. R. Shivanagi    | 126     | 121     | 126     |
| Prof. D. I. Kalappanavar | 144     | 139     | 140     |
| Prof. G. B. Shettar      | 115     | 116     | 141     |
| Prof. M. R. Patil        | 134     | 134     | 134     |



There is a provision in the institute to invite eminent personalities from Industry and Academia to teach various courses. This enables sharing of knowledge and expertism of visiting faculties also bridge the Industry-Academia gap. The following table shows the visiting faculty details.

**Table 5.18. Summary of the Visiting/Adjunct/Emeritus Faculty**

| Academic Year | Course Code | Course Name                                           | No. of Hours | Name of visiting faculty                     | Organization                                                                      |
|---------------|-------------|-------------------------------------------------------|--------------|----------------------------------------------|-----------------------------------------------------------------------------------|
| 2020-21       | UHS001N     | Fundamentals of Quantitative Aptitude and Soft Skills | 30           | <b>Mr. Manjesh S. P.</b><br>Lead Trainer     | Innovations Unlimited Training Services, Vidyaranyapura, Bangalore<br>www.iuts.in |
|               | UHS002N     | Advanced Quantitative Aptitude and Soft Skills        | 30           | <b>Mr. Aswin Das</b><br>Consultant Trainer   |                                                                                   |
|               | UHS003N     | Career Planning and Professional Skills               | 30           | <b>Ms. Ayesha H.</b><br>Consultant Trainer   |                                                                                   |
| 2019-20       | UHS001N     | Fundamentals of Quantitative Aptitude and Soft Skills | 30           | <b>Ms. Dipti D.</b><br>Consultant Trainer    | Innovations Unlimited Training Services, Vidyaranyapura, Bangalore<br>www.iuts.in |
|               | UHS002N     | Advanced Quantitative Aptitude and Soft Skills        | 30           | <b>Ms. Archana M.</b><br>Consultant Trainer  |                                                                                   |
|               | UHS003N     | Career Planning and Professional Skills               | 30           | <b>Mr. Saravanan</b><br>Consultant Trainer   |                                                                                   |
| 2018-19       | UHS001N     | Fundamentals of Quantitative Aptitude and Soft Skills | 30           | <b>Mr. Vineet M.</b><br>Consultant Trainer   | Innovations Unlimited Training Services, Vidyaranyapura, Bangalore<br>www.iuts.in |
|               | UHS002N     | Advanced Quantitative Aptitude and Soft Skills        | 30           | <b>Mr. Jagadeep K.</b><br>Consultant Trainer |                                                                                   |
|               | UHS003N     | Career Planning and Professional Skills               | 30           | <b>Mr. Pratyus</b><br>Consultant Trainer     |                                                                                   |

## 6 FACILITIES AND TECHNICAL SUPPORT (80)

Total Marks 80.00

### 6.1 Adequate and well equipped laboratories, and technical manpower (40)

Total Marks 40.00

| Sr. No | Name of the Laboratory | Number of students per set up(Batch Size) | Name of the Important Equipment | Weekly utilization status(all the courses for which the lab is utilized) | Technical Manpower Support  |                  |                  |
|--------|------------------------|-------------------------------------------|---------------------------------|--------------------------------------------------------------------------|-----------------------------|------------------|------------------|
|        |                        |                                           |                                 |                                                                          | Name of the Technical staff | Designation      | Qualification    |
| 1      | Aho – Ullman L         | 30                                        | LCD Projector,                  | Introduction to                                                          | Sri. A. D. Lokh             | Asst. Instructor | Diploma (Com     |
| 2      | Abraham Silbe          | 30                                        | IBM Web Servi                   | Analysis of Alg                                                          | Sri. Kupendrak              | Foreman          | Diploma (Com     |
| 3      | Tim- Berner's L        | 30                                        | LCD Projector,                  | Data Structure                                                           | Sri. D. S. Gada             | Asst.Instructor  | Diploma (Com     |
| 4      | Quine-McClusk          | 30                                        | Digital Trainer I               | Logic Design L                                                           | Sri. V. S. Nashi            | Asst. Instructor | ITI (Electronics |
| 5      | Dr. A.P.J Abdul        | 30                                        | Smart Board, 1                  | Project Phase .                                                          | Sri. V. S. Nashi            | Asst. Instructor | ITI (Electronics |
| 6      | Aho – Ullman L         | 30                                        | LCD Projector,                  | Software Testir                                                          | Sri. A. D. Lokh             | Asst. Instructor | Diploma (Com     |
| 7      | Abraham Silbe          | 30                                        | IBM Web Servi                   | Project Phase .                                                          | Sri. Kupendrak              | Foreman          | Diploma (Com     |
| 8      | Tim- Berner's L        | 30                                        | LCD Projector,                  | Project Phase .                                                          | Sri. D. S. Gada             | Asst. Instructor | Diploma (Com     |
| 9      | Dr. A.P.J Abdul        | 30                                        | Smart Board, 2                  | Mini Projects (C                                                         | Sri. V. S. Nashi            | Asst. Instructor | ITI (Electronics |

**6.2 Laboratories maintenance and overall ambience (10)**

Total Marks 10.00

Institute Marks : 10.00

All the laboratories are well equipped as per the curriculum and the POs as well as good qualities of computing facilities in the department. The following are the procedures used to maintain the laboratories and overall ambience:

- **Repairing** – To elongate the functional life of equipments significantly, the conduction of small repairs or replacement of parts as and when they are needed.
- **Calibration Services** - Calibration process for the equipments in the laboratory such as multi-meter, ammeter, Digital IC Tester, and etc., is carried out on every semester.
- **Regular Cleaning** - Carried out with respect to each laboratory for maintaining good ambience.
- **Outsource/In-house** – For laboratory equipment maintenance and overall repairing is carried out by the technical professionals are called yearly for servicing.
- A technical staff regularly maintains/updates the software's in the laboratories such as firewalls, PC maintains, software tools, minor repairs, and the antivirus software's.
- Laboratory manuals are prepared for the experiments and provided to the students at the time of practical hours.
- First aid kit and Fire extinguishers are available in the department.
- Laboratories rooms are well ventilated with sufficient lighting and air conditions.
- Emergency light connections available in each lab in case of power failure.
- Cup-boards or racks are available for students to place their belongings in each laboratory.
- Each Lab is equipped with smart board, Internet, and other amenities.
- Each lab is equipped with Projectors to aid the teaching process.
- Exclusively, a project lab has been provided for the students to carry out their mini and major project work. This will promote innovation and creativity in students

The following figures show the each laboratory of deapntment photos:





Figure 6.1. Aho – Ullman Lab (ISE Lab - 1)



Figure 6.2. Abraham Silberschatz Lab (ISE Lab -2)



Figure 6.3. Tim- Berner's Lee Lab (ISE Lab -3)



Figure 6.4. Quine-McCluskey Lab (ISE Lab -4)

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### 6.3 Safety measures in laboratories (10)

Total Marks 10.00

| Sr. No | Laboratory Name                        | Safety Measures                                                                                                                                                                     |
|--------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1      | Aho – Ullman Lab (ISE Lab - 1)         | Specific safety rules like Do's and Don'ts are displayed and instructed for all students. Fire Extinguishers Antivirus Software Firewall First Aid Kit Emergency Power off Systems. |
| 2      | Abraham Silberschatz Lab (ISE Lab -2)  | Specific safety rules like Do's and Don'ts are displayed and instructed for all students. Fire Extinguishers Antivirus Software Firewall First Aid Kit Emergency Power off Systems. |
| 3      | Tim- Berner's Lee Lab (ISE Lab -3)     | Specific safety rules like Do's and Don'ts are displayed and instructed for all students. Fire Extinguishers Antivirus Software Firewall First Aid Kit Emergency Power off Systems. |
| 4      | Quine-McCluskey Lab (ISE Lab -4)       | Specific Safety Rules like Do's and Don'ts are displayed and instructed for all students. Fire Extinguishers First Aid Kit Emergency Power off systems                              |
| 5      | Dr. A.P.J Abdul Kalam Lab (ISE Lab -5) | Specific Safety Rules like Do's and Don'ts are displayed and instructed for all students. Fire Extinguishers Antivirus Software First Aid Kit Emergency Power off systems           |

**6.4 Project laboratory (20)**

Total Marks 20.00

Institute Marks : 20.00

The department has been providing facilities to students towards project work. The project laboratory enables UG students to obtain hands-on experience and to realize their project ideas as executable projects. The final year and miniproject of 8th semester and 6th semester are carried out in this laboratory, respectively.

The following facilities available for project work are shown in below table 6.1.

Table 6.1. List of facilities

| Sl. No. | Facilities                                                                                                                                                                                                                                                            | Utilization                                                                         | Relevance to POs and PSOs                                                                       |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| 01      | Licensed and Open Source Software's - MS Office 365, C#.Net, Visual Studio 2012, Windows 7, Quick Heal Antivirus, windows server 2016, VPSuite, OpenSuse, Oracle11G, Java SE Development Kit, TurboC++, Geany, Wireshark, NS2, Fedora 24, Ubuntu, Selenium IDE, etc., | Utilized by UG students to implement group tasks/mini projects/final year projects. | PO-2, PO-3, PO-4, PO-5, PO-6, PO-7, PO-8, PO-9, PO-11, and PO-12<br><br>PSO-1, PSO-2, and PSO-3 |

|    |                                                                                           |                                                                                                                                                                                                                       |
|----|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 02 | Internet / Wi-Fi Connection.                                                              | Utilized by UG students, research scholars and faculty members <ul style="list-style-type: none"> <li>To be abreast with present technology and market</li> <li>Communication</li> <li>Research Activities</li> </ul> |
| 03 | Network Simulator Tools or Software's – NCTUNs, NS2, NetSim.                              | Used for student project implementation                                                                                                                                                                               |
| 04 | Verilog Software.                                                                         | Used for logic circuits simulations.                                                                                                                                                                                  |
| 05 | Keil Micro-Vision4 – Open source software tool and Microcontroller 8051, and MSP 430 kit. | Used for microcontroller and embedded system projects                                                                                                                                                                 |
| 06 | Internet of Things (IoT) Kit.                                                             | Used to carry out the projects.                                                                                                                                                                                       |

The following figure 6.5 shows the photo of project laboratory.



Figure 6.5. Project laboratory.

## 7 CONTINUOUS IMPROVEMENT (75)

Total Marks 75.00

### 7.1 Actions taken based on the results of evaluation of each of the COs, POs & PSOs (30)

Total Marks 30.00

Institute Marks : 30.00

### POs Attainment Levels and Actions for Improvement- (2020-21)

| POs                                 | Target Level | Attainment Level | Observations                                                                  |
|-------------------------------------|--------------|------------------|-------------------------------------------------------------------------------|
| <b>PO 1 : Engineering Knowledge</b> |              |                  |                                                                               |
| PO 1                                | 2.5          | 2.89             | Target achieved. Hence the same procedure will be continued for the next year |

Action1: Target revised to 2.75 Action2: By observations of PO attainments for the courses Discrete Mathematical Structures (UIS322C) and Computer Organization (UIS314C), the levels are at low. Hence it is decided to take more extra classes, use teaching tools, and solve more problems in the courses. Action3: Conduct expert lectures, seminars, and Student Development Programmes (SDPs) to help the students to attain this.

**PO 2 : Problem Analysis**

|      |     |      |                                                                               |
|------|-----|------|-------------------------------------------------------------------------------|
| PO 2 | 2.5 | 2.94 | Target achieved. Hence the same procedure will be continued for the next year |
|------|-----|------|-------------------------------------------------------------------------------|

Action1: Target revised to 2.75 Action2: The attainment levels for the courses Discrete Mathematical Structures(UIS322C) and Computer Organization(UIS314C) are at level 2. Hence more attains needs to be given to these courses. Use better pedagogical techniques to teach and solve more problems. Action3: Conduct guest lectures, seminars, SDPs, and encourage the students to take online courses.

**PO 3 : Design/development of Solutions**

|      |     |      |                                                                               |
|------|-----|------|-------------------------------------------------------------------------------|
| PO 3 | 2.5 | 2.88 | Target achieved. Hence the same procedure will be continued for the next year |
|------|-----|------|-------------------------------------------------------------------------------|

Action1: Target revised to 2.75 Action2: The attainment level of course Logic Design (UIS308C) is at level 2, more problems on design of logic circuits are to be conducted. Action3: Training sessions to enhance hands on experience are to be conducted. This helps the students to understand the process of analysis and designing solutions to complex problems. Action4: Students are encouraged to participate in state level/ national level competitions.

**PO 4 : Conduct Investigations of Complex Problems**

|      |     |      |                                                                               |
|------|-----|------|-------------------------------------------------------------------------------|
| PO 4 | 2.5 | 2.92 | Target achieved. Hence the same procedure will be continued for the next year |
|------|-----|------|-------------------------------------------------------------------------------|

Action1: Target revised to 2.75 Action2: Attainment in course Data Structures and Algorithms (UIS325C) is found to be at level 2. Hence remedial classes to be conducted for low performing students. Action3: Students are encouraged to publish their work in National/International conferences and journals. Action4: To provide financial assistance to the students. Action5: Also, proposed to organize a national level technical competitions/conferences.

**PO 5 : Modern Tool Usage**

|      |     |      |                                                                               |
|------|-----|------|-------------------------------------------------------------------------------|
| PO 5 | 2.5 | 3.00 | Target achieved. Hence the same procedure will be continued for the next year |
|------|-----|------|-------------------------------------------------------------------------------|

Action1: Target revised to 2.75 Action2: To provide hands on training on usage of modern tools, compilers, languages, design tools, testing tools, etc.

**PO 6 : The Engineer and Society**

|      |     |      |                                                                               |
|------|-----|------|-------------------------------------------------------------------------------|
| PO 6 | 2.5 | 2.96 | Target achieved. Hence the same procedure will be continued for the next year |
|------|-----|------|-------------------------------------------------------------------------------|

Action1: Target revised to 2.75 Action2: To encourage the students to take memberships and participate in professional societies like IEEE, CSI, IETE,IEI, and ISTE. Action3: Internship is made mandatory part of the curriculum at 7th semester level. Action4: AICTE has introduced 100 point activities which enables the students to participate in societal activities, understand various problems of the society and provide solutions.

**PO 7 : Environment and Sustainability**

|      |     |   |                                                                               |
|------|-----|---|-------------------------------------------------------------------------------|
| PO 7 | 2.5 | 3 | Target achieved. Hence the same procedure will be continued for the next year |
|------|-----|---|-------------------------------------------------------------------------------|

Action1: Target revised to 2.75 Action2: The various awareness camps on environmental issues like use of plastic, waste management and use e-resources are conducted. Action3: Students are encouraged to take up projects on societal and environmental issues.

**PO 8 : Ethics**

|      |     |     |                                                                               |
|------|-----|-----|-------------------------------------------------------------------------------|
| PO 8 | 2.5 | 2.9 | Target achieved. Hence the same procedure will be continued for the next year |
|------|-----|-----|-------------------------------------------------------------------------------|

Action1: Target revised to 2.75 Action2: Students are enforced to adhere to the institutional code of conduct and ethical practices. Action3: The various reviews are conducted in all the courses and project works to ensure adherence of professional ethics and standards. Action4: The plagiarism checks are introduced to ensure originality of the project.

**PO 9 : Individual and Team Work**

|      |     |      |                                                                               |
|------|-----|------|-------------------------------------------------------------------------------|
| PO 9 | 2.5 | 2.94 | Target achieved. Hence the same procedure will be continued for the next year |
|------|-----|------|-------------------------------------------------------------------------------|

Action1: Target revised to 2.75 Action2: Students are encouraged to participate in various co-curricular activities in individual and teams at State/National level events. Action3: More group assignments are given in various courses.

**PO 10 : Communication**

|       |     |      |                                                                               |
|-------|-----|------|-------------------------------------------------------------------------------|
| PO 10 | 2.5 | 2.95 | Target achieved. Hence the same procedure will be continued for the next year |
|-------|-----|------|-------------------------------------------------------------------------------|

Action1: Target revised to 2.75 Action2: Training programmes are organized to enhance the employability skills and hence placements. Action3: Students are encouraged to present the seminars in some of the courses in advanced topics.

**PO 11 : Project Management and Finance**

|                                                                                                                                                                  |     |      |                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|-------------------------------------------------------------------------------|
| PO 11                                                                                                                                                            | 2.5 | 2.93 | Target achieved. Hence the same procedure will be continued for the next year |
| Action1: Target revised to 2.75 Action2: Students are encouraged to prepare project proposals for funding to various agencies like KSCST, VTU, KBITS, and TEQIP. |     |      |                                                                               |

**PO 12 : Life-long Learning**

|                                                                                                                                                                                                            |     |      |                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|-------------------------------------------------------------------------------|
| PO 12                                                                                                                                                                                                      | 2.5 | 2.93 | Target achieved. Hence the same procedure will be continued for the next year |
| Action1: Target revised to 2.75 Action2: MOOCS/SWYAM/NPTEL/Coursera are made mandatory in the curriculum Action3: Students are motivated to register to GRE/TOEFL/GATE and other competitive examinations. |     |      |                                                                               |

**PSOs Attainment Levels and Actions for Improvement- (2020-21)**

| PSOs | Target Level | Attainment Level | Observations |
|------|--------------|------------------|--------------|
|------|--------------|------------------|--------------|

**PSO 1 : To demonstrate the abilities to apply the basic science and engineering fundamentals to solve complex engineering problems in the society.**

|                                                                                                                                    |     |      |                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------|-----|------|-------------------------------------------------------------------------------|
| PSO 1                                                                                                                              | 2.5 | 2.95 | Target achieved. Hence the same procedure will be continued for the next year |
| Action1: Target revised to 2.75 Action2: Conduct extra classes and tutorials on basic science and engineering fundamental courses. |     |      |                                                                               |

**PSO 2 : To demonstrate the abilities to provide information and communication technology solutions using modern engineering and IT tools at affordable cost working as a team member.**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |      |                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|-------------------------------------------------------------------------------|
| PSO 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2.5 | 2.95 | Target achieved. Hence the same procedure will be continued for the next year |
| Action1: Target revised to 2.75 Action2: Introduced tutorial classes for courses Data Structures and Algorithms, Logic Design, Theoretical Foundations of Computer Science, and Operating Systems to enhance the knowledge in program specific areas. Action3: Conduct SDPs like workshops, training programmes, seminars on various modern engineering ICT tools. Action4: Offer more electives and skill oriented courses to strengthen the domain knowledge and make job ready graduates. Action5: Students are encouraged to participate in various activities as a team member. |     |      |                                                                               |

**PSO 3 : To exhibit ethical, social and professional responsibilities and engage in life long learning.**

|                                                                                                                                                                                                                                                                                                                                                                                      |     |      |                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|-------------------------------------------------------------------------------|
| PSO 3                                                                                                                                                                                                                                                                                                                                                                                | 2.5 | 2.95 | Target achieved. Hence the same procedure will be continued for the next year |
| Action1: Target revised to 2.75 Action2: Students are motivated to participate in various activities at state/national levels. Action3: Adherence to institutional rules and regulations, standards, academic schedules, etc. Action4: Motivate students to start their own ventures through Institute Industry Interaction cell (IIIC) and Entrepreneurship Development Cell (EDC). |     |      |                                                                               |

**7.2 Academic Audit and actions taken thereof during the period of Assessment (15)**

Total Marks 15.00

Institute Marks : 15.00

Academic audit is a scientific and systematic method of reviewing the quality of academic process in the institution. It is related to quality assurance and enhancing the quality of academic activities in the institute. The Academic Audit is to be conducted by all the departments twice during an academic year, preferably at the end of each semester. The audit is to be conducted by a committee constituted by the HoD and approved by Principal.

Suggestive composition of the committee:

- **Chairman** - Professor and Head of the department
- **Member** – One Professor
- **Member** – One Associate Professor
- **Member** – One Assistant Professor
- **Member External** – One Professor/Associate Professor (Subject Expert)

The scope of the audit includes:

1. Course files
2. Actual content delivery
3. Assignments
4. Quality of question papers (Both CIE and SEE)
5. Quality of experiments and maintenance of proper lab records
6. Quality of projects and their evaluation as per suggested rubrics
7. Quality of internship and their evaluation as per suggested rubrics
8. Details of workshops/conferences/FDP/SDP organized by the department
9. Details of academic load in the department

Dean (Academic)

Principal



Basaveshwar Engineering College (Autonomous), Bagalkot

Internal Academic Audit from the Department

Name of the Department: Information Science &amp; Engineering

Academic Year:

Semester:

Date of Audit:

**i. Course Files**

| Parameter                                    |                        | 1 | 2 | 3 | 4 | 5 | Remarks |
|----------------------------------------------|------------------------|---|---|---|---|---|---------|
|                                              | Course Code            |   |   |   |   |   |         |
|                                              | Initial of the faculty |   |   |   |   |   |         |
| Student roll list                            |                        |   |   |   |   |   |         |
| Time table                                   |                        |   |   |   |   |   |         |
| Syllabus copy                                |                        |   |   |   |   |   |         |
| Course objectives & outcomes                 |                        |   |   |   |   |   |         |
| Academic calendar                            |                        |   |   |   |   |   |         |
| Lesson plan                                  |                        |   |   |   |   |   |         |
| Topics covered under content beyond syllabus |                        |   |   |   |   |   |         |
| No. of topics covered using ICT              |                        |   |   |   |   |   |         |
| Innovations in teachings (If any)            |                        |   |   |   |   |   |         |

|                                             |  |  |  |  |  |  |
|---------------------------------------------|--|--|--|--|--|--|
| SEE Question papers                         |  |  |  |  |  |  |
| CIE Question Papers                         |  |  |  |  |  |  |
| CO Assessment                               |  |  |  |  |  |  |
| Calculation of indirect attainment          |  |  |  |  |  |  |
| CO – PO Mapping (Justification if Required) |  |  |  |  |  |  |
| Course exit survey form                     |  |  |  |  |  |  |

**Note:** Verify each parameter and indicate with Y: Yes or N: No or NA: Not Applicable

Chairman

Member

Member

Member

Member

## ii. Actual Content Delivery

| Parameter                                                      |                        | 1 | 2 | 3 | 4 | 5 | Remarks |
|----------------------------------------------------------------|------------------------|---|---|---|---|---|---------|
|                                                                | Course code            |   |   |   |   |   |         |
|                                                                | Initial of the faculty |   |   |   |   |   |         |
| No of classes allotted as per academic calendar and time table |                        |   |   |   |   |   |         |
| No of classes engaged as per attendance Register               |                        |   |   |   |   |   |         |
| Percentage of the syllabus covered                             |                        |   |   |   |   |   |         |

## iii. Assignments

| Parameter                                                             |                        | 1 | 2 | 3 | 4 | 5 | Remarks |
|-----------------------------------------------------------------------|------------------------|---|---|---|---|---|---------|
|                                                                       | Course code            |   |   |   |   |   |         |
|                                                                       | Initial of the faculty |   |   |   |   |   |         |
| Mention the number of assignments given                               |                        |   |   |   |   |   |         |
| Nature of assignments (Descriptive/MCQ/programming/simulation others) |                        |   |   |   |   |   |         |
| Quality of questions (Rate on the scale 0 - 5)*                       |                        |   |   |   |   |   |         |

\*0 – Very poor, 1 – Poor, 2 – Average, 3 – Good, 4 – Very good, 5 - Excellent

## iv. Evaluation

|  |  | 1 | 2 | 3 | 4 | 5 | Remarks |
|--|--|---|---|---|---|---|---------|
|  |  |   |   |   |   |   |         |



| Parameter                                                            | Course code        |  |  |  |  |  |
|----------------------------------------------------------------------|--------------------|--|--|--|--|--|
|                                                                      | Initial of Faculty |  |  |  |  |  |
| Quality of CIE question papers-(As per Blooms taxonomy or not) – Y/N |                    |  |  |  |  |  |
| Pass percentage in CIE                                               |                    |  |  |  |  |  |
| Quality of SEE question papers-(As per Blooms taxonomy or not) – Y/N |                    |  |  |  |  |  |
| Pass percentage in SEE                                               |                    |  |  |  |  |  |

#### v. Quality of Experiments and maintenance of proper lab records

| Parameter                                                            |                        | 1 | 2 | 3 | 4 | 5 | Remarks |
|----------------------------------------------------------------------|------------------------|---|---|---|---|---|---------|
|                                                                      | Lab code               |   |   |   |   |   |         |
|                                                                      | Initial of the faculty |   |   |   |   |   |         |
| No. of Experiments as per syllabus                                   |                        |   |   |   |   |   |         |
| No. of Experiments Conducted                                         |                        |   |   |   |   |   |         |
| Quality of Experiments (Rate on the scale 0 -5)*                     |                        |   |   |   |   |   |         |
| Whether experiments are assessed soon after they are completed (Y/N) |                        |   |   |   |   |   |         |
| Percentage of experiments involving design                           |                        |   |   |   |   |   |         |
| No. of open ended experiments given                                  |                        |   |   |   |   |   |         |

\*0 – Very poor, 1 – Poor, 2 – Average, 3 – Good, 4 – Very good, 5 - Excellent

#### vi. Quality of Projects and their evaluation as per suggested Rubrics

| Parameter                                                             |                      | 1 | 2 | 3 | 4 | 5 | Remarks |
|-----------------------------------------------------------------------|----------------------|---|---|---|---|---|---------|
|                                                                       | Course code          |   |   |   |   |   |         |
|                                                                       | Initial of the guide |   |   |   |   |   |         |
| Nature of Project (HW/SW/Fabrication/Simulation)                      |                      |   |   |   |   |   |         |
| Quantity of work (Rate on the scale 0 - 5)*                           |                      |   |   |   |   |   |         |
| Quality of the project (Rate on the scale 0 -5)*                      |                      |   |   |   |   |   |         |
| Number of intermediate reviews are conducted as per suggested rubrics |                      |   |   |   |   |   |         |
| Whether financed from any agency (Y/N)                                |                      |   |   |   |   |   |         |
| Whether supported by any industry (Y/N)                               |                      |   |   |   |   |   |         |
| Received any awards/recognition or any publication (Y/N)              |                      |   |   |   |   |   |         |

\*0 – Very poor, 1 – Poor, 2 – Average, 3 – Good, 4 – Very good, 5 - Excellent

**vii. Quality of Internships and their evaluation as per suggested Rubrics**

| Parameter                                                 |            | 1 | 2 | 3 | 4 | 5 | Remarks |
|-----------------------------------------------------------|------------|---|---|---|---|---|---------|
|                                                           | Internship |   |   |   |   |   |         |
|                                                           | Guide      |   |   |   |   |   |         |
| Nature of internship (HW/SW/Fabrication/Simulation/study) |            |   |   |   |   |   |         |
| Duration of Internship                                    |            |   |   |   |   |   |         |
| Mode of Internship (Online/offline)                       |            |   |   |   |   |   |         |
| Paid internship from the industry (Y/N)                   |            |   |   |   |   |   |         |
| Quantum of work (Rate on the scale 0 - 5)*                |            |   |   |   |   |   |         |
| Evaluated as per suggested rubrics (Y/N)                  |            |   |   |   |   |   |         |

\*0 – very poor, 1 – poor, 2 – average, 3 – good, 4 – very good, 5 - excellent

**viii. Details of workshops/conferences/FDP/SDP organized by the department**

| S. No | Title | Name of the coordinator | Funding agency | No. of participants |
|-------|-------|-------------------------|----------------|---------------------|
|       |       |                         |                |                     |

**ix. Details of academic load in the department**

| S. No                                        | Name of the faculty | No. of Courses |   | No. of Periods |   | Credits | Work load (Hrs.) | Remarks |
|----------------------------------------------|---------------------|----------------|---|----------------|---|---------|------------------|---------|
|                                              |                     | T              | P | T              | P |         |                  |         |
|                                              |                     |                |   |                |   |         |                  |         |
| Total No. of Direct Teaching hours           |                     |                |   |                |   |         |                  |         |
| Average No. of Direct Teaching hours/faculty |                     |                |   |                |   |         |                  |         |

**Academic Audit Committee Members**

| S. No. | Name | Designation | Affiliation |  |
|--------|------|-------------|-------------|--|
| 1.     |      |             |             |  |
| 2.     |      |             |             |  |
| 3.     |      |             |             |  |
| 4.     |      |             |             |  |
| 5      |      |             |             |  |

**Dean (Academic)****Principal**

The academic audit committee members:

- |                                |                                                                                                      |
|--------------------------------|------------------------------------------------------------------------------------------------------|
| 1. Dr. Shobha R. Patil         | : Chairman, Professor and Head, Dept. of ISE, BEC(A), Bagalkot                                       |
| 2.Dr. Sadhana P. Bangarashetti | : Member, Professor, Dept. of ISE, BEC(A), Bagalkot                                                  |
| 3.Prof. P. V. Kulkarni         | : Member, Associate Professor, Dept. of ISE, BEC(A), Bagalkot                                        |
| 4.Prof. P. K. Deshpande        | : Member, Assisatnt Professor, Dept. of ISE, BEC(A), Bagalkot                                        |
| 5. Dr. Mahesh U. Nagaral       | : Member(External), Subject Expert, Associate Professor, BLDEAs, Dr. P. G. Halakatti, CET, Vijayapur |

Academic audit report for the academic year 2020-21 is as shown below:



# Basaveshwar Engineering College (Autonomous), Bagalkot

## Internal Academic Audit from the Department

Name of the Department: Information Science & Engineering

Academic Year: 2020-21

Semester: Even

Date of Audit: 16/04/2022

### I. Course Files

| Parameter                                    |                        | 1       | 2       | 3       | 4       | 5       | Remarks           |
|----------------------------------------------|------------------------|---------|---------|---------|---------|---------|-------------------|
|                                              | Course Code            | UIS403C | UIS424C | UIS608C | UIS613C | UIS065E |                   |
|                                              | Initial of the faculty | GMP     | VSP     | PSP     | DIK     | CRS     |                   |
| Student roll list                            |                        | Y       | Y       | Y       | Y       | Y       |                   |
| Time table                                   |                        | Y       | Y       | Y       | Y       | Y       |                   |
| Syllabus copy                                |                        | Y       | Y       | Y       | Y       | Y       |                   |
| Course objectives & outcomes                 |                        | Y       | Y       | Y       | Y       | Y       |                   |
| Academic calendar                            |                        | Y       | Y       | Y       | Y       | Y       |                   |
| Lesson plan                                  |                        | Y       | Y       | Y       | Y       | Y       |                   |
| Topics covered under content beyond syllabus |                        | N       | N       | Y       | Y       | Y       |                   |
| No. of topics covered using ICT              |                        | N       | N       | N       | N       | N       | use for both      |
| Innovations in teachings (If any)            |                        | N       | N       | N       | N       | N       |                   |
| SEE Question papers                          |                        | Y       | Y       | Y       | Y       | Y       |                   |
| CIE Question Papers                          |                        | Y       | Y       | Y       | Y       | Y       |                   |
| CO Assessment                                |                        | Y       | Y       | Y       | Y       | Y       |                   |
| Calculation of indirect attainment           |                        | N       | Y       | N       | N       | N       | Do CES to do this |
| CO - PO Mapping (Justification if Required)  |                        | Y       | Y       | Y       | Y       | Y       |                   |
| Course exit survey form                      |                        | N       | Y       | N       | N       | N       | Do CES in future  |

Note: Verify each parameter and indicate with Y: Yes or N: No or NA: Not Applicable

Dr. S. R. Patil  
Chairman

Dr. M. U. Nagaral  
Member

Dr. S. P. Bangarashetti  
Member

Prof. P. V. Kulkarni  
Member

Prof. P. K. Deshpande  
Member

## II. Actual Content Delivery

| Parameter                                                      |                        | 1       | 2       | 3       | 4       | 5       | Remarks      |
|----------------------------------------------------------------|------------------------|---------|---------|---------|---------|---------|--------------|
|                                                                | Course code            | UIS403C | UIS424C | UIS608C | UIS613C | UIS065E |              |
|                                                                | Initial of the faculty | GMP     | VSP     | PSP     | DIK     | CRS     |              |
| No of classes allotted as per academic calendar and time table |                        | 52      | 52      | 66      | 40      | 52      | Satisfactory |
| No of classes engaged as per attendance Register               |                        | 50      | 50      | 62      | 38      | 52      |              |
| Percentage of the syllabus covered                             |                        | 100     | 100     | 98      | 98      | 100     |              |

  
Dr. S. R. Patil  
Chairman

  
Dr. M. U. Nagara  
Member

  
Dr. S. P. Bangarashetti  
Member

  
Prof. P. V. Kulkarni  
Member

  
Prof. P. K. Deshpande  
Member

## II. Actual Content Delivery

| Parameter                                                      |                        | 1       | 2       | 3       | 4       | 5       | Remarks      |
|----------------------------------------------------------------|------------------------|---------|---------|---------|---------|---------|--------------|
|                                                                | Course code            | UIS403C | UIS424C | UIS608C | UIS613C | UIS065E |              |
|                                                                | Initial of the faculty | GMP     | VSP     | PSP     | DIK     | CRS     |              |
| No of classes allotted as per academic calendar and time table |                        | 52      | 52      | 66      | 40      | 52      | Satisfactory |
| No of classes engaged as per attendance Register               |                        | 50      | 50      | 62      | 38      | 52      |              |
| Percentage of the syllabus covered                             |                        | 100     | 100     | 98      | 98      | 100     |              |

  
Dr. S. R. Patil  
Chairman

  
Dr. M. U. Nagaral  
Member

  
Dr. S. P. Bangarashetti  
Member

  
Prof. P. V. Kulkarni  
Member

  
Prof. P. K. Deshpande  
Member

## III. Assignments

| Parameter                                                             |                        | 1       | 2           | 3                         | 4           | 5           | Remarks    |
|-----------------------------------------------------------------------|------------------------|---------|-------------|---------------------------|-------------|-------------|------------|
|                                                                       | Course code            | UIS403C | UIS424C     | UIS608C                   | UIS613C     | UIS065E     |            |
|                                                                       | Initial of the faculty | GMP     | VSP         | PSP                       | DIK         | CRS         |            |
| Mention the number of assignments given                               |                        | 01      | 25          | 02                        | 03          | 01          | Sufficient |
| Nature of assignments (Descriptive/MCQ/programming/simulation others) |                        | MCQ     | Descriptive | Descriptive & Programming | Descriptive | Descriptive |            |
| Quality of questions (Rate on the scale 0 - 5)*                       |                        | 4       | 3           | 4                         | 4           | 4           |            |

\*0 - Very poor, 1 - Poor, 2 - Average, 3 - Good, 4 - Very good, 5 - Excellent

UIS424C: VSP: Assignments are more. Suggested to reduce to 4.

  
Dr. S. R. Patil  
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Dr. M. U. Nagaral  
Member

  
Dr. S. P. Bangarashetti  
Member

  
Prof. P. V. Kulkarni  
Member

  
Prof. P. K. Deshpande  
Member

## IV. Evaluation

| Parameter                                                            |                    | 1       | 2       | 3       | 4       | 5       | Remarks             |
|----------------------------------------------------------------------|--------------------|---------|---------|---------|---------|---------|---------------------|
|                                                                      | Course code        | UIS403C | UIS424C | UIS608C | UIS613C | UIS065E |                     |
|                                                                      | Initial of Faculty | GMP     | VSP     | PSP     | DIK     | CRS     |                     |
| Quality of CIE question papers-(As per Blooms taxonomy or not) – Y/N |                    | Y       | Y       | Y       | Y       | Y       | } <i>Initiation</i> |
| Pass percentage in CIE                                               |                    | 99      | 98.98   | 97.72   | 99.04   | 100     |                     |
| Quality of SEE question papers-(As per Blooms taxonomy or not) – Y/N |                    | Y       | Y       | Y       | Y       | Y       |                     |
| Pass percentage in SEE                                               |                    | 97.98   | 97.98   | 96.15   | 93.75   | 100     |                     |

Suggestions: Internal scrutiny of CIE question papers may be conducted

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Chairman

*Nagaral*  
Dr. M. U. Nagaral  
Member

*Bangarashetti*  
Dr. S. P. Bangarashetti  
Member

*Kulkarni*  
Prof. P. V. Kulkarni  
Member

*Deshpande*  
Prof. P. K. Deshpande  
Member



## V. Quality of Experiments and maintenance of proper lab records

| Parameter                                                            |                        | 1      | 2       | 3       | 4       | Remarks      |
|----------------------------------------------------------------------|------------------------|--------|---------|---------|---------|--------------|
|                                                                      | Lab code               | UIS421 | UIS611L | UIS612L | UIS410L |              |
|                                                                      | Initial of the faculty | VSP    | PSP     | DIK     | SNK     |              |
| No. of Experiments as per syllabus                                   |                        | 10     | 10      | 10      | 11      | Satisfactory |
| No. of Experiments Conducted                                         |                        | 10     | 10      | 10      | 11      |              |
| Quality of Experiments (Rate on the scale 0-5)*                      |                        | 4      | 4       | 4       | 4       |              |
| Whether experiments are assessed soon after they are completed (Y/N) |                        | Y      | Y       | Y       | Y       |              |
| Percentage of experiments involving design                           |                        | N      | N       | N       | N       |              |
| No. of open ended experiments given                                  |                        | N      | N       | N       | N       |              |

\*0 – Very poor, 1 – Poor, 2 – Average, 3 – Good, 4 – Very good, 5 - Excellent

*Patil*  
Dr. S. R. Patil  
Chairman

*Nagaral*  
Dr. M. U. Nagaral  
Member

*Bangarashetti*  
Dr. S. P. Bangarashetti  
Member

*Kulkarni*  
Prof. P. V. Kulkarni  
Member

*Deshpande*  
Prof. P. K. Deshpande  
Member

## VI. Quality of Projects and their evaluation as per suggested Rubrics

| Parameter                                                             |                      | 1       | 2       | 3       | 4       | 5       | Remarks |
|-----------------------------------------------------------------------|----------------------|---------|---------|---------|---------|---------|---------|
|                                                                       | Course code          | UIS806P | UIS806P | UIS806P | UIS806P | UIS806P |         |
|                                                                       | Initial of the guide | VSP     | PSP     | CRS     | SNK     | PKD     |         |
| Nature of Project (HW/SW/Fabrication/Simulation)                      |                      | SW      | HW+SW   | HW+SW   | HW+SW   | SW      |         |
| Quantity of work (Rate on the scale 0 - 5)*                           |                      | 3       | 4       | 4       | 4       | 4       |         |
| Quality of the project (Rate on the scale 0 - 5)*                     |                      | 3       | 4       | 4       | 4       | 4       |         |
| Number of intermediate reviews are conducted as per suggested rubrics |                      | 3       | 3       | 3       | 3       | 3       |         |
| Whether financed from any agency (Y/N)                                |                      | N       | N       | N       | N       | N       |         |
| Whether supported by any industry (Y/N)                               |                      | N       | N       | N       | N       | N       |         |
| Received any awards/recognition or any publication (Y/N)              |                      | N       | N       | N       | N       | N       |         |

\*0 – Very poor, 1 – Poor, 2 – Average, 3 – Good, 4 – Very good, 5 – Excellent

  
Dr. S. R. Patil  
Chairman

  
Dr. M. U. Nagaral  
Member

  
Dr. S. P. Bangarashetti  
Member

  
Prof. P. V. Kulkarni  
Member

  
Prof. P. K. Deshpande  
Member

## VII. Quality of Internships and their evaluation as per suggested Rubrics

| Parameter                                                 |            | 1 | 2 | 3 | 4 | 5 | Remarks |
|-----------------------------------------------------------|------------|---|---|---|---|---|---------|
|                                                           | Internship |   |   |   |   |   |         |
|                                                           | Guide      |   |   |   |   |   |         |
| Nature of internship (HW/SW/Fabrication/Simulation/study) |            |   |   |   |   |   |         |
| Duration of Internship                                    |            |   |   |   |   |   |         |
| Mode of Internship (Online/offline)                       |            |   |   |   |   |   |         |
| Paid Internship from the industry (Y/N)                   |            |   |   |   |   |   |         |
| Quantum of work (Rate on the scale 0 - 5)*                |            |   |   |   |   |   |         |
| Evaluated as per suggested rubrics (Y/N)                  |            |   |   |   |   |   |         |

\*0 – very poor, 1 – poor, 2 – average, 3 – good, 4 – very good, 5 - excellent

*Patil*  
Dr. S. R. Patil  
Chairman

*Nagaral*  
Dr. M. U. Nagaral  
Member

*Bangarashetti*  
Dr. S. P. Bangarashetti  
Member

*Kulkarni*  
Prof. P. V. Kulkarni  
Member

*Deshpande*  
Prof. P. K. Deshpande  
Member

## VIII. Details of workshops/conferences/FDP/SDP organized by the department: Attached

| S. No | Title | Name of the coordinator | Funding agency | No. of participants |
|-------|-------|-------------------------|----------------|---------------------|
|       |       |                         |                |                     |
|       |       |                         |                |                     |
|       |       |                         |                |                     |
|       |       |                         |                |                     |
|       |       |                         |                |                     |
|       |       |                         |                |                     |
|       |       |                         |                |                     |

  
Dr. S. R. Patil  
Chairman

  
Dr. M. U. Nagaral  
Member

  
Dr. S. P. Bangarashetti  
Member

  
Prof. P. V. Kulkarni  
Member

  
Prof. P. K. Deshpande  
Member


2020-21

## VIII. Details of workshops/conferences/FDP/SDP organized by the department

| S. No | Title                          | Name of the coordinator                                        | Funding agency | No. of participants |
|-------|--------------------------------|----------------------------------------------------------------|----------------|---------------------|
| 1.    | Pre-Placement Traing Programme | Dr. B. M. Reshmi<br>Prof. P. K. Deshpande                      | RISE           | 23                  |
| 2.    | Pre-Placement Traing Programme | Dr. B. M. Reshmi<br>Prof. P. K. Deshpande                      | RISE           | 23                  |
| 3.    | Data Science and Analytics     | Dr. L. B. Bhajantri<br>Prof. R. B. Math<br>Prof. G. B. Shettar | RISE           | 150                 |
| 4.    | ASP. Net and XML               | Dr. S. R. Patil<br>Prof. P. K. Deshpande                       | RISE           | 25                  |
| 5.    | Advanced C Programming         | Dr. S. R. Patil<br>Prof. P. K. Deshpande<br>Prof. V. S. Patil  | RISE           | 100                 |
| 6.    | Pre-Placement Traing Programme | Dr. B. M. Reshmi<br>Prof. P. K. Deshpande                      | RISE           | 110                 |
| 7.    | Revisiting "C"                 | Dr. S. R. Patil<br>Prof. P. K. Deshpande<br>Prof. V. S. Patil  | RISE           | 80                  |


- RISE-Rays of Information science and Engineering

  
Dr. S. R. Patil  
Chairman

  
Dr. M. U. Nagaral  
Member

  
Dr. S. P. Bangarashetti  
Member

  
Prof. P. V. Kulkarni  
Member

  
Prof. P. K. Deshpande  
Member

## IX. Details of academic load in the department

| S. No                                        | Name of the faculty  | No. of Courses |   | No. of Periods |    | Credits | Work load (Hrs.) | Remarks |
|----------------------------------------------|----------------------|----------------|---|----------------|----|---------|------------------|---------|
|                                              |                      | T              | P | T              | P  |         |                  |         |
| 1                                            | Dr. S. R. Patil      | 2              | - | 6              | -  | 6       | 6                |         |
| 2                                            | Dr.S.P.Bangarashetti | -              | 1 | -              | 16 | 2       | 16               |         |
| 3                                            | P. V. Kulkarni       | 2              | 1 | 6              | -  | 6       | 6                |         |
| 4                                            | P.S.Puranik          | 2              | 1 | 10             | 12 | 9.5     | 22               |         |
| 5                                            | Dr. A. D. Devangavi  | 2              | - | 8              | -  | 8       | 8                |         |
| 6                                            | Dr. L. B. Bhajantri  | 2              | - | 8              | -  | 4       | 10               |         |
| 7                                            | R. B. Math           | 1              | 1 | 3              | 12 | 4.5     | 15               |         |
| 8                                            | V S Patil            | 2              | 1 | 10             | 12 | 9.5     | 22               |         |
| 9                                            | S N Kugali           | 2              | 1 | 6              | 12 | 7.5     | 18               |         |
| 10                                           | G M Patil            | 2              | 1 | 8              | 12 | 9.5     | 20               |         |
| 11                                           | P. K. Deshpande      | 2              | 1 | 10             | 12 | 11.5    | 22               |         |
| 12                                           | Deepa.I.K            | 2              | 1 | 6              | 12 | 7.5     | 18               |         |
| 13                                           | G B Shettar          | 2              | 1 | 6              | 12 | 7.5     | 18               |         |
| 14                                           | C.R.Shivanagi        | 2              | 1 | 8              | 12 | 9.5     | 20               |         |
| Total No. of Direct Teaching hours           |                      |                |   |                |    |         | 221              |         |
| Average No. of Direct Teaching hours/faculty |                      |                |   |                |    |         | 15.78            |         |

  
Dr. S. R. Patil  
Chairman

  
Dr. M. U. Nagaral  
Member

  
Dr. S. P. Bangarashetti  
Member

  
Prof. P. V. Kulkarni  
Member

  
Prof. P. K. Deshpande  
Member

Based on the suggestions/remarks by internal academic audit committee for the year 2020-21. The following actions as shown in the below table will be taken for the academic year 2021-22.

Table 7.1. Action taken report

| Sl. No. | Suggestions/Remarks                                                                               | Action taken                                                                                                                                        |
|---------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 01      | Use of ICT tools.                                                                                 | Classrooms and laboratories are equipped with ICT tools. The faculty are using the tools for teaching process, wherever applicable.                 |
| 02      | Course exit survey to be conducted and results are to be used in assessing course level outcomes. | The course exit survey forms are designed and implemented in the academic year 2021-22. The results will be used for assessing the course outcomes. |
| 03      | Subject code UIS424C assignments are more, suggested to reduce to four.                           | Faculty are informed.                                                                                                                               |
| 04      | Internal scrutiny of CIE question papers may be conducted.                                        | Internal committee for scrutinizing CIE question paper will be formed and implemented in the academic year 2021-22.                                 |

### 7.3 Improvement in Placement, Higher Studies and Entrepreneurship (10)

Total Marks 10.00

Institute Marks : 10.00

Table 7.2. Placement, Higher studies and Entrepreneurs details

| Sl. No. | Placement     |                        |             |            | Higher studies | Entrepreneurs |
|---------|---------------|------------------------|-------------|------------|----------------|---------------|
|         | Academic Year | No. of students Placed | Highest LPA | Lowest LPA |                |               |
| 01      | 2018-19       | 68                     | 5.0         | 1.2        | 08             | 01            |
| 02      | 2019-20       | 68                     | 12          | 1.2        | 03             | 01            |
| 03      | 2020-21       | 67                     | 15          | 2.5        | --             | 01            |

Table 7.3. Placement details

| Sl. No. | Name of the Company | Academic Year          |      |                        |     |                        |     |
|---------|---------------------|------------------------|------|------------------------|-----|------------------------|-----|
|         |                     | 2018-19                |      | 2019-20                |     | 2020-21                |     |
|         |                     | No. of students Placed | LPA  | No. of students Placed | LPA | No. of students Placed | LPA |
| 01      | TCS Ninja           | 15                     | 3.3  | 11                     | 3.3 | 13                     | 4.5 |
| 02      | Global Edge         | 01                     | 3.0  | 03                     | 3.0 | 0                      | 0   |
| 03      | Silver Peak Global  | 01                     | 4.2  | 0                      | 0   | 0                      | 0   |
| 04      | Infosys             | 06                     | 3.6  | 05                     | 3.5 | 07                     | 3.6 |
| 05      | KodNest             | 05                     | 2.4  | 01                     | 2.4 | 0                      | 0   |
| 06      | CMS IT Services     | 05                     | 1.2  | 0                      | 0   | 0                      | 0   |
| 07      | Sasken              | 01                     | 5.0  | 05                     | 5.0 | 0                      | 0   |
| 08      | OPPO Mobiles        | 02                     | 3    | 0                      | 0   | 0                      | 0   |
| 09      | RIIIT               | 08                     | 1.8  | 0                      | 0   | 0                      | 0   |
| 10      | HireCraft           | 01                     | 2    | 0                      | 0   | 0                      | 0   |
| 11      | Mindtree            | 02                     | 2.97 | 01                     | 3.6 | 0                      | 0   |
| 12      | Cerner              | 01                     | 5    | 0                      | 0   | 0                      | 0   |

|    |                                                             |    |      |    |      |    |     |
|----|-------------------------------------------------------------|----|------|----|------|----|-----|
| 13 | Tata Consultancy Services                                   | 03 | 3.3  | 04 | 3.3  | 0  | 0   |
| 14 | Thing Techno Systems                                        | 01 | 2.16 | 0  | 0    | 0  | 0   |
| 15 | Meru Info Solutions                                         | 01 | 1.9  | 0  | 0    | 0  | 0   |
| 16 | ICET IT Solutions                                           | 01 | 1.8  | 0  | 0    | 0  | 0   |
| 17 | Fiport                                                      | 01 | 2.76 | 0  | 0    | 0  | 0   |
| 18 | IBM                                                         | 02 | 3.3  | 03 | 4.25 | 0  | 0   |
| 19 | Qualitest                                                   | 01 | 1.62 | 0  | 0    | 0  | 0   |
| 20 | Accenture                                                   | 04 | 3.75 | 02 | 4.5  | 12 | 4.5 |
| 21 | Appsource                                                   | 01 | 2.16 | 0  | 0    | 0  | 0   |
| 22 | TECHasitis                                                  | 01 | 1.2  | 0  | 0    | 0  | 0   |
| 23 | BYJU's                                                      | 01 | 3.0  | 0  | 0    | 0  | 0   |
| 24 | Ebix Technologies                                           | 01 | 3.0  | 0  | 0    | 0  | 0   |
| 25 | HCL Technologies                                            | 02 | 3.5  | 0  | 0    | 02 | 3.5 |
| 26 | GADGET                                                      | 01 | 3.0  | 0  | 0    | 0  | 0   |
| 27 | Cognizant                                                   | 01 | 2.1  | 03 | 4.0  | 03 | 2.5 |
| 28 | Capgemini                                                   | 01 | 3.5  | 01 | 3.3  | 0  | 0   |
| 29 | Coreflex                                                    | 01 | 3.0  | 0  | 0    | 0  | 0   |
| 30 | SLK                                                         | 01 | 3.1  | 02 | 3.2  | 0  | 0   |
| 31 | Broadridge                                                  | 01 | 3.2  | 0  | 0    | 0  | 0   |
| 32 | Mitel                                                       | 01 | 7.0  | 0  | 0    | 0  | 0   |
| 33 | Maintec                                                     | 01 | 3.0  | 0  | 0    | 0  | 0   |
| 34 | Cognizant                                                   | 01 | 2.1  | 0  | 0    | 0  | 0   |
| 35 | DXC                                                         | 01 | 3.5  | 0  | 0    | 0  | 0   |
| 36 | Karnataka State Electronics Development Corporation Limited | 01 | 1.2  | 0  | 0    | 0  | 0   |
| 37 | Hexaware Technologies                                       | 0  | 0    | 01 | 3.2  | 0  | 0   |
| 38 | Wipro                                                       | 0  | 0    | 01 | 3.5  | 05 | 5.0 |
| 39 | Qspider                                                     | 0  | 0    | 01 | 1.8  | 0  | 0   |
| 40 | ABC                                                         | 0  | 0    | 01 | 0.96 | 0  | 0   |
| 41 | Karnataka State Remote Sensing Application                  | 0  | 0    | 01 | 1.8  | 0  | 0   |
| 42 | IQVIA                                                       | 0  | 0    | 04 | 12.0 | 0  | 0   |
| 43 | SkyclipIT                                                   | 0  | 0    | 01 | 1.2  | 0  | 0   |
| 44 | L & T                                                       | 0  | 0    | 02 | 2.4  | 0  | 0   |
| 45 | Test Yantra                                                 | 0  | 0    | 01 | 2.4  | 0  | 0   |
| 46 | Tech Mahindra                                               | 0  | 0    | 04 | 3.6  | 0  | 0   |
| 47 | Shashi Exports Pvt. Ltd.                                    | 0  | 0    | 01 | 1.5  | 0  | 0   |
| 48 | Terra Pay                                                   | 0  | 0    | 01 | 3.3  | 0  | 0   |



|              |                                            |           |           |           |           |            |           |
|--------------|--------------------------------------------|-----------|-----------|-----------|-----------|------------|-----------|
| 49           | Infinite                                   | 0         | 0         | 01        | 2.8       | 0          | 0         |
| 50           | NTT DaTa                                   | 0         | 0         | 02        | 3.3       | 0          | 0         |
| 51           | AJAPRO AI Technologies                     | 0         | 0         | 01        | 2.4       | 0          | 0         |
| 52           | amdocs                                     | 0         | 0         | 01        | 4.5       | 0          | 0         |
| 53           | CGI                                        | 0         | 0         | 03        | 3.6       | 0          | 0         |
| 54           | G&M Global Solutions                       | 0         | 0         | 01        | 3.0       | 0          | 0         |
| 55           | Deloitte                                   | 0         | 0         | 01        | 2.4       | 0          | 0         |
| 56           | SONATA                                     | 0         | 0         | 01        | 3.0       | 0          | 0         |
| 57           | AGGNE                                      | 0         | 0         | 01        | 4.5       | 05         | 2.5       |
| 58           | Sigma                                      | 0         | 0         | 01        | 4.5       | 0          | 0         |
| 59           | ADP                                        | 0         | 0         | 01        | 5.0       | 0          | 0         |
| 60           | Bitwise                                    | 0         | 0         | 0         | 0         | 01         | 2.5       |
| 61           | Bosch                                      | 0         | 0         | 0         | 0         | 01         | 2.5       |
| 62           | EY                                         | 0         | 0         | 0         | 0         | 01         | 2.5       |
| 63           | FORD                                       | 0         | 0         | 0         | 0         | 01         | 2.5       |
| 64           | Girmiti Software Pvt. Ltd.                 | 0         | 0         | 0         | 0         | 25         | 3.5       |
| 65           | Herman Miller                              | 0         | 0         | 0         | 0         | 01         | 3.5       |
| 66           | Insystel                                   | 0         | 0         | 0         | 0         | 09         | 7.0       |
| 67           | Mphasis                                    | 0         | 0         | 0         | 0         | 01         | 3.3       |
| 68           | Pluribus Networks                          | 0         | 0         | 0         | 0         | 01         | 15.0      |
| 69           | Nggawe Nirman Technologies Private Limited | 0         | 0         | 0         | 0         | 01         | 3.3       |
| 70           | Nirman Technologies                        | 0         | 0         | 0         | 0         | 07         | 3.3       |
| 71           | RedBot innovations                         | 0         | 0         | 0         | 0         | 02         | 3.5       |
| 72           | Sagar Soft India                           | 0         | 0         | 0         | 0         | 03         | 5.0       |
| 73           | Sprinklr                                   | 0         | 0         | 0         | 0         | 01         | 3.3       |
| 74           | TATA ELXSI                                 | 0         | 0         | 0         | 0         | 01         | 4.5       |
| 75           | TCS Digital                                | 0         | 0         | 0         | 0         | 01         | 3.3       |
| 76           | Vayavya Labs                               | 0         | 0         | 0         | 0         | 01         | 3.3       |
| <b>Total</b> |                                            | <b>79</b> | <b>--</b> | <b>74</b> | <b>--</b> | <b>105</b> | <b>--</b> |

Table 7.4. Higher Studies details

| Sl. No. | Academic Year | USN        | Student Name     | Name of the college                       | Degree      |
|---------|---------------|------------|------------------|-------------------------------------------|-------------|
| 01      | 2018-19       | 2BA16IS415 | Suma Bilagi      | Basaveshwar Engineering College, Bagalkot | M.Tech(CSE) |
| 02      |               | 2BA15IS026 | Ganga A Hadagali | Basaveshwar Engineering College, Bagalkot | M.Tech(CSE) |
|         |               |            |                  |                                           |             |

|    |         |            |                      |                                                                       |             |
|----|---------|------------|----------------------|-----------------------------------------------------------------------|-------------|
| 03 |         | 2BA16IS408 | Md. Ibrahim Korti    | Basaveshwar Engineering College, Bagalkot                             | M.Tech(CSE) |
| 04 |         | 2BA16IS404 | Deepa S. Kolar       | Basaveshwar Engineering College, Bagalkot                             | M.Tech(CSE) |
| 05 |         | 2BA15IS085 | Veena Karalatti      | KLE Technological University                                          | M.Tech(CSE) |
| 06 |         | 2BA15IS063 | Sahana Munavalli     | Basaveshwar Engineering College, Bagalkot                             | M.Tech(CSE) |
| 07 |         | 2BA15IS055 | Rachana R Sanni      | BMS College of Engineering, Bangalore                                 | M.Tech(CSE) |
| 08 |         | 2BA15IS041 | Muneerabanu Attar    | University Visvesvaraya College of Engineering , University Bangalore | M.Tech(CSE) |
| 01 | 2019-20 | 2BA16IS077 | Sudharani            | M. S. Ramaiah Institute of Technology, Bangalore                      | M.Tech(CSE) |
| 02 |         | 2BA17IS400 | Akshay Malagan       | R. V. College of Engineering, Bangalore                               | M.Tech(CSE) |
| 03 |         | 2BA16IS048 | Praful Kumar Shettar | Institute of Management Studies, Bagalkot                             | M.Tech(CSE) |
| 01 | 2020-21 | --         | --                   | --                                                                    | --          |

Table 7.4. Entrepreneurship details

| Sl. No. | Academic Year | Name of the Entrepreneur       | Address                                                                                                                                                                                                                                |
|---------|---------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01      | 2018-19       | Ms. Vidya Inamdar Founder      | <b>Instantitech technology Pvt. Ltd.</b><br>#912,4 <sup>th</sup> Cross, Opposite City Union Bank, NS Road, near Sidappa Square, KR Mohalla, Mysuru -570004, Karnataka<br>Contact number: 9620862939<br>E-mail ID: vidyaui017@gmail.com |
| 02      | 2019-20       | Mr. Bhargav Gumaste Foudner    | <b>MindVision Technologies Ltd.</b><br>Abhi Anku Complex 3rd floor, Sector no 05 plot no 1/B kalidas circle, Bagalkot, Karnataka - 587103                                                                                              |
| 03      | 2020-21       | Mr. Harsha Kulkarni Co-Founder | <b>Tantramash Technology Ltd.</b><br>P No. 233 Ravindra,Cchalukya Nagar 5th cross Badami, Bagalkot, Karnataka 587201<br>Contact number:7829840141<br>E-mail ID: harsha.rk007@gmail.com                                                 |

| Item                                                                                |                         | 2021-22 | 2020-21 | 2019-20 |
|-------------------------------------------------------------------------------------|-------------------------|---------|---------|---------|
| National Level Entrance Examination                                                 | No of students admitted | 00      | 00      | 00      |
|                                                                                     | Opening Score/Rank      | 00      | 00      | 00      |
|                                                                                     | Closing Score/Rank      | 00      | 00      | 00      |
| State/ University/ Level Entrance Examination/ Others<br>KCET                       | No of students admitted | 94      | 79      | 82      |
|                                                                                     | Opening Score/Rank      | 20005   | 21513   | 21419   |
|                                                                                     | Closing Score/Rank      | 85425   | 122929  | 119461  |
| Name of the Entrance Examination for Lateral Entry or lateral entry details<br>KCET | No of students admitted | 9       | 12      | 12      |
|                                                                                     | Opening Score/Rank      | 2771    | 3944    | 3944    |
|                                                                                     | Closing Score/Rank      | 14840   | 11935   | 11935   |
| Average CBSE/Any other board result of admitted students(Physics, Chemistry&Maths)  |                         | 76      | 78      | 81      |

## 8 FIRST YEAR ACADEMICS (50)

Total Marks 46.62

## 8.1 First Year Student-Faculty Ratio (FYSFR) (5)

Total Marks 5.00

Institute Marks : 5.00

Please provide First year faculty information considering load

| Name of the faculty member | PAN No.    | Qualification      | Date of Receiving Highest Degree | Area of Specialization                       | Designation         | Date of joining | Teaching load (%) |       |       | Currently Associated (Yes / No) | Nature Of Association (Regular / Contract) | Date Of leaving(In case Currently Associated is 'No') |
|----------------------------|------------|--------------------|----------------------------------|----------------------------------------------|---------------------|-----------------|-------------------|-------|-------|---------------------------------|--------------------------------------------|-------------------------------------------------------|
|                            |            |                    |                                  |                                              |                     |                 | CAY               | CAYm1 | CAYm2 |                                 |                                            |                                                       |
| Dr. B.G.Sheep:             | AGZPS8065Q | ME/M. Tech and PhD | 20/10/2010                       | MEMS Embedded systems                        | Professor           | 23/03/1993      | 35                | 0     | 0     | Yes                             | Regular                                    |                                                       |
| Prof. Shashidh             | ACMPH6336G | M.E/M.Tech         | 26/10/2010                       | VLSI Design and Embedded systems             | Assistant Professor | 02/05/2005      | 50                | 0     | 0     | Yes                             | Regular                                    |                                                       |
| Prof. Anand Ur             | ABLPU4394D | M.E/M.Tech         | 15/10/2009                       | Digital electronics and communication system | Assistant Professor | 16/08/2007      | 44                | 0     | 0     | Yes                             | Regular                                    |                                                       |
| Prof. Sharanap             | ACQPH5255E | M.E/M.Tech         | 26/09/2013                       | Internet of things                           | Assistant Professor | 18/09/2008      | 13                | 13    | 13    | Yes                             | Regular                                    |                                                       |
| Prof. B.Veeresh            | ACHPV3036G | M.E/M.Tech         | 24/12/2000                       | Control system                               | Associate Professor | 11/11/1994      | 50                | 0     | 70    | Yes                             | Regular                                    |                                                       |
| Prof. B.M.Ang              | AUHPA5159R | M.E/M.Tech         | 27/09/2015                       | Wireless sensor networks                     | Assistant Professor | 02/08/2010      | 75                | 75    | 75    | Yes                             | Regular                                    |                                                       |
| Prof. Supriya H            | AFQPH0705N | M.E/M.Tech         | 21/12/2010                       | Digital communication                        | Assistant Professor | 16/09/2010      | 40                | 40    | 0     | Yes                             | Regular                                    |                                                       |

|                   |            |                    |            |                                              |                     |            |     |     |     |     |         |  |
|-------------------|------------|--------------------|------------|----------------------------------------------|---------------------|------------|-----|-----|-----|-----|---------|--|
| Prof. Poornima    | APMPC1605G | M.E/M.Tech         | 09/05/2015 | Digital electronics and communication system | Assistant Professor | 19/11/2011 | 18  | 18  | 0   | Yes | Regular |  |
| Dr. A.H. Agadi    | ADWPA1909K | M.Sc. and PhD      | 04/04/2017 | Fluid Dynamics                               | Assistant Professor | 14/11/2005 | 25  | 25  | 25  | Yes | Regular |  |
| Sri. I. M. Police | ABEPI8253N | M.Sc               | 25/03/2002 | Fluid dynamics                               | Assistant Professor | 18/02/2008 | 25  | 25  | 25  | Yes | Regular |  |
| Smt. V. M. Pud    | BDMPP6948J | M.Sc               | 11/06/1998 | Mathematics                                  | Assistant Professor | 14/11/2008 | 50  | 50  | 50  | Yes | Regular |  |
| Dr. B. F. Ronac   | AZGPR6933A | ME/M. Tech and PhD | 29/01/2018 | SPV Based irrigation systems                 | Professor           | 04/10/2010 | 50  | 50  | 50  | Yes | Regular |  |
| Dr. R. L. Naik    | ABNPN9774A | ME/M. Tech and PhD | 09/05/2015 | Power electronics and wecs                   | Professor           | 23/05/1997 | 50  | 50  | 0   | Yes | Regular |  |
| Mr. S.M.Patil     | ACIPP7508E | M.E/M.Tech         | 02/08/1991 | Machine Drives and Power Electronics         | Associate Professor | 06/02/1987 | 50  | 50  | 100 | Yes | Regular |  |
| S. S. Gujarathi   | AAUPG9390H | MCA                | 23/03/2004 | Computer Applications                        | Assistant Professor | 03/10/2003 | 100 | 0   | 0   | Yes | Regular |  |
| Sudha K. S.       | BRDPS2807L | MCA                | 25/02/2007 | Computer Applications                        | Assistant Professor | 06/06/2007 | 100 | 100 | 100 | Yes | Regular |  |
| S. M. Magi        | ASHPM2795F | MCA                | 25/02/2007 | Computer Applications                        | Assistant Professor | 19/10/2007 | 100 | 100 | 100 | Yes | Regular |  |
| M. H. Shirur      | CBVPS1118M | MCA                | 12/03/2008 | Computer Applications                        | Assistant Professor | 25/09/2009 | 100 | 100 | 100 | Yes | Regular |  |
| C. M. Jangin      | APWPJ2652Q | MCA                | 15/06/2006 | Computer Applications                        | Assistant Professor | 26/09/2012 | 100 | 100 | 100 | Yes | Regular |  |
| Dr. P. G. Rakar   | ABBPR9784N | ME/M. Tech and PhD | 12/03/2013 | Geotechnical Engg                            | Associate Professor | 02/05/1988 | 50  | 50  | 50  | Yes | Regular |  |
| Prof. B. S. Har   | AAEPH5129F | M.E/M.Tech         | 03/03/1998 | Structural Engg                              | Associate Professor | 14/08/1985 | 100 | 100 | 100 | Yes | Regular |  |
| Dr. S. H. Sanni   | ANOPS2680R | ME/M. Tech and PhD | 09/01/2018 | Structural Engg                              | Associate Professor | 28/02/2000 | 33  | 33  | 33  | Yes | Regular |  |
| Prof. S. A. Kar   | BTNPK5604H | M.E/M.Tech         | 18/04/2011 | Structural Engg                              | Assistant Professor | 04/10/2011 | 50  | 50  | 50  | Yes | Regular |  |
| Dr. P. L. Timma   | ACBPT8402A | M.Sc. and PhD      | 17/01/1997 | Kinetics and Catalysis                       | Professor           | 12/03/1997 | 100 | 100 | 100 | Yes | Regular |  |
| Dr. S. K. Patil   | ASEPP4343H | M.Sc. and PhD      | 16/08/2013 | Coordination Chemistry                       | Associate Professor | 03/10/1997 | 100 | 100 | 100 | Yes | Regular |  |
| Dr. V. R. Kattir  | AVSPK1884H | M.Sc. and PhD      | 16/12/2015 | Fuel Technology                              | Assistant Professor | 03/12/1997 | 100 | 100 | 100 | Yes | Regular |  |
| Prof. A.B.Kiras   | GUXPK1290P | M.Sc               | 20/10/2017 | Organic Chemistry                            | Assistant Professor | 29/01/2020 | 100 | 100 | 100 | Yes | Regular |  |

|                  |            |                    |            |                                             |                     |            |     |     |     |     |         |  |
|------------------|------------|--------------------|------------|---------------------------------------------|---------------------|------------|-----|-----|-----|-----|---------|--|
| Dr. K Chandras   | ADOPC6302N | M.Sc. and PhD      | 21/12/1996 | Ultrafast Spectroscopy                      | Professor           | 28/06/2000 | 100 | 100 | 100 | Yes | Regular |  |
| Dr. J. G. Ghant  | AKDPG7032K | M.Sc. and PhD      | 29/02/1996 | Solid state Physics                         | Professor           | 11/07/2007 | 100 | 100 | 100 | Yes | Regular |  |
| Dr. S. U. Durg   | AAQPH0836B | M.Sc. and PhD      | 10/05/2012 | material scienceMagneto electric composites | Assistant Professor | 21/12/1990 | 100 | 100 | 100 | Yes | Regular |  |
| Smt. R. P. Araç  | ADDP6843M  | M.Sc               | 01/04/1996 | Nuclear Physics                             | Assistant Professor | 26/01/1997 | 100 | 100 | 100 | Yes | Regular |  |
| Prof. S. S. Bop  | AFMPB1895D | M.Sc               | 12/06/1993 | Solid State physics                         | Assistant Professor | 01/01/1998 | 100 | 100 | 100 | Yes | Regular |  |
| Dr. V. S. Katti  | BRYPK7795L | M.Sc. and PhD      | 11/06/2013 | Solid State physics                         | Assistant Professor | 31/01/2022 | 100 | 0   | 0   | Yes | Regular |  |
| Dr. B.G.Hokrar   | ADSPH7012G | ME/M. Tech and PhD | 13/09/2017 | International Trade                         | Assistant Professor | 21/08/2006 | 100 | 100 | 100 | Yes | Regular |  |
| Dr. Bharati.S.M  | AORPK1450R | M.Sc. and PhD      | 01/09/2005 | Biofuels and Food processing                | Professor           | 18/09/2003 | 15  | 15  | 15  | Yes | Regular |  |
| Dr. Sharada P.   | AMQPP9641Q | M.Sc. and PhD      | 06/03/2013 | Biotechnology                               | Associate Professor | 13/05/2005 | 16  | 16  | 16  | Yes | Regular |  |
| Dr.Madhumala     | ASEPP4336N | M.Sc. and PhD      | 03/04/2021 | Bioremediation                              | Assistant Professor | 02/02/2007 | 15  | 15  | 15  | Yes | Regular |  |
| Dr.Premjyoti C.  | BDHPP6855M | M.Sc. and PhD      | 03/04/2021 | Algal Biofuels                              | Assistant Professor | 09/02/2007 | 19  | 19  | 19  | Yes | Regular |  |
| Prof. Preeti S.  | BEQPK8422K | M.Phil             | 20/11/2008 | Photochemistry                              | Assistant Professor | 19/02/2007 | 19  | 19  | 19  | Yes | Regular |  |
| Dr Shilpa.K. Jiç | ANCPJ1342F | M.Sc. and PhD      | 23/01/2010 | Biochemistry                                | Assistant Professor | 04/10/2010 | 20  | 20  | 20  | Yes | Regular |  |
| Prof.H.R.Patil   | AJYPP4303J | M.E/M.Tech         | 26/02/2007 | Management                                  | Associate Professor | 12/01/1996 | 50  | 0   | 0   | Yes | Regular |  |
| Dr.H.M.Kadlim:   | AGRPK7310C | ME/M. Tech and PhD | 30/12/2019 | Thermal                                     | Assistant Professor | 20/05/1997 | 50  | 0   | 50  | Yes | Regular |  |
| Dr.S.M.Jigajinn  | AESPJ7057G | ME/M. Tech and PhD | 17/05/2013 | Material Science                            | Assistant Professor | 02/02/2007 | 50  | 50  | 50  | Yes | Regular |  |
| Prof.R.S.Naik    | AKDPR3028E | M.E/M.Tech         | 10/09/2003 | Production                                  | Assistant Professor | 02/02/2007 | 50  | 0   | 0   | Yes | Regular |  |
| Prof.P.B.Bajant  | BSEPB3627B | M.E/M.Tech         | 11/01/2016 | Production                                  | Assistant Professor | 16/02/2016 | 50  | 50  | 50  | Yes | Regular |  |
| Dr.G.B.Rudrak:   | ABBPR9790G | ME/M. Tech and PhD | 23/06/2005 | Production                                  | Professor           | 28/05/1987 | 50  | 0   | 0   | Yes | Regular |  |
| Prof.S.B.Wada    | AAEPW8047P | M.E/M.Tech         | 26/02/2007 | Production                                  | Assistant Professor | 11/11/1992 | 50  | 50  | 50  | Yes | Regular |  |

|                  |            |                    |            |                            |                     |            |     |     |     |     |         |  |
|------------------|------------|--------------------|------------|----------------------------|---------------------|------------|-----|-----|-----|-----|---------|--|
| Dr.R.V.Kurahat   | AGXPK9887E | ME/M. Tech and PhD | 10/11/2012 | Metallurgy                 | Assistant Professor | 24/02/2000 | 50  | 0   | 50  | Yes | Regular |  |
| Prof.B.S.Vivek   | AKHPV5926D | M.E/M.Tech         | 12/03/2008 | Production                 | Assistant Professor | 07/09/2002 | 50  | 50  | 50  | Yes | Regular |  |
| Prof.S.S.Davar   | AHEPD4884C | M.E/M.Tech         | 15/09/2011 | Design                     | Assistant Professor | 02/01/2012 | 50  | 0   | 0   | Yes | Regular |  |
| Dr.A.N.Sonnad    | CRKPS8566G | ME/M. Tech and PhD | 21/05/2014 | Production                 | Assistant Professor | 21/05/2014 | 50  | 0   | 0   | Yes | Regular |  |
| Prof.V.P.Girisaç | AGYPJ3993J | M.E/M.Tech         | 22/09/2007 | Production                 | Assistant Professor | 15/02/1995 | 50  | 50  | 0   | Yes | Regular |  |
| Dr.S.G.Sargan    | AONPS3731D | ME/M. Tech and PhD | 02/08/2011 | Design                     | Assistant Professor | 01/09/1997 | 50  | 50  | 0   | Yes | Regular |  |
| Dr. V. M. Shett  | AFAPS4307M | M.Sc. and PhD      | 25/03/2014 | Graph Theory               | Associate Professor | 31/10/1994 | 0   | 50  | 50  | Yes | Regular |  |
| Dr. M. M.Birad   | APFPB7125K | M.Sc. and PhD      | 28/07/2008 | Fluid Dynamics             | Associate Professor | 23/03/2009 | 0   | 40  | 40  | Yes | Regular |  |
| Dr. K. Rama Pr   | ARGPR7665H | M.Sc. and PhD      | 17/02/2010 | Fluid mechanics            | Associate Professor | 08/01/2011 | 0   | 50  | 50  | Yes | Regular |  |
| Dr. S. V. Gurus  | AENPG9021L | M.Sc. and PhD      | 28/12/2019 | Topology                   | Assistant Professor | 17/06/1999 | 0   | 25  | 25  | Yes | Regular |  |
| Prof. R.G. Patil | ADNPP6785B | M.E/M.Tech         | 24/12/1993 | Electrical Machines        | Associate Professor | 19/02/1987 | 0   | 100 | 100 | Yes | Regular |  |
| Prof. V. C. Jair | BAVPJ8138A | M.E/M.Tech         | 11/12/2014 | PG power and energy system | Assistant Professor | 11/11/2016 | 50  | 100 | 100 | Yes | Regular |  |
| Prof. Nanda P    | ADTPP8906A | M.E/M.Tech         | 06/02/1987 | Computer Networks          | Associate Professor | 20/02/1987 | 100 | 75  | 50  | Yes | Regular |  |
| Prof. V. B. Hun  | ACTPH4034J | M.E/M.Tech         | 07/01/2010 | Computer Science and Engg  | Associate Professor | 03/10/2006 | 0   | 100 | 100 | Yes | Regular |  |
| Prof.R.T.Patil   | ADSPP9404A | B.E/B.Tech         | 29/12/1984 | Design                     | Assistant Professor | 05/11/1984 | 0   | 100 | 100 | Yes | Regular |  |
| Prof.G.K.Patil   | AFSPP6671H | B.E/B.Tech         | 06/05/1988 | Design                     | Assistant Professor | 13/11/1989 | 0   | 50  | 0   | Yes | Regular |  |
| Prof.K.D.Aswal   | AKXPA8850F | M.E/M.Tech         | 23/02/2004 | Production                 | Assistant Professor | 24/09/2003 | 0   | 50  | 50  | Yes | Regular |  |
| Prof. S.C.Hiren  | AALPH0474L | M.E/M.Tech         | 17/04/2003 | Power Electronics          | Associate Professor | 01/10/1994 | 34  | 0   | 0   | Yes | Regular |  |
| Prof. S. S. Ratl | CDEPR9140M | M.E/M.Tech         | 05/05/2016 | Power Systems              | Associate Professor | 06/02/1987 | 0   | 0   | 50  | Yes | Regular |  |
| Prof. S. S. Tam  | ANTPT2332A | M.E/M.Tech         | 07/01/2010 | Power and Energy Systems   | Assistant Professor | 02/05/2005 | 0   | 0   | 50  | Yes | Regular |  |

|                  |            |                    |            |                    |                     |            |   |     |     |     |         |  |
|------------------|------------|--------------------|------------|--------------------|---------------------|------------|---|-----|-----|-----|---------|--|
| Dr. M. M. Hana   | AATPH0254N | ME/M. Tech and PhD | 19/09/2015 | Structural Engg    | Associate Professor | 06/12/1997 | 0 | 0   | 50  | Yes | Regular |  |
| Prof. B. R. Hire | AAUPH4098K | M.E/M.Tech         | 07/11/2019 | Environmental Engg | Associate Professor | 23/07/1994 | 0 | 0   | 50  | Yes | Regular |  |
| Prof. G. S. Hire | AACPH6400R | M.E/M.Tech         | 08/04/2012 | Structural Engg    | Assistant Professor | 04/10/2011 | 0 | 0   | 50  | Yes | Regular |  |
| Miss. L.P.Chan   | BCXPC1963Q | M.Sc               | 09/10/2018 | General Chemistry  | Assistant Professor | 29/01/2020 | 0 | 100 | 100 | Yes | Regular |  |
| Mrs. V.P. Vasar  | BDXPV2114B | M.Sc               | 22/04/2015 | General Chemistry  | Assistant Professor | 29/01/2020 | 0 | 100 | 100 | Yes | Regular |  |
| Sri. S. B. Nava  | ARNPN8477A | M.Sc               | 03/06/2009 | Spectroscopy       | Assistant Professor | 17/09/2012 | 0 | 0   | 100 | Yes | Regular |  |
| Prof.P.C.Kolur   | CIHPK7012F | M.E/M.Tech         | 20/08/2011 | Design             | Assistant Professor | 02/03/2016 | 0 | 0   | 50  | Yes | Regular |  |
| Dr.S.N.Kurbet    | ABYPK8528Q | ME/M. Tech and PhD | 18/02/2000 | Design             | Professor           | 12/11/1984 | 0 | 0   | 50  | Yes | Regular |  |
| Dr.S.S.Balli     | ACHPB4002A | ME/M. Tech and PhD | 28/02/2004 | Design             | Professor           | 18/02/1987 | 0 | 0   | 50  | Yes | Regular |  |
| Prof.B.R.Endig   | AAGPE5221M | M.E/M.Tech         | 10/09/2005 | Design             | Assistant Professor | 19/03/2003 | 0 | 0   | 50  | Yes | Regular |  |

| Year           | Number Of Students(approved intake strength) N | Number of Faculty members(considering fractional load) F | FYSFR (N/F) | *Assessment=(5*20)/FYSFR(Limited to Max.5) |
|----------------|------------------------------------------------|----------------------------------------------------------|-------------|--------------------------------------------|
| 2019-20(CAYm2) | 90                                             | 39                                                       | 2           | 5                                          |
| 2020-21(CAYm1) | 90                                             | 34                                                       | 3           | 5                                          |
| 2021-22(CAY)   | 90                                             | 33                                                       | 3           | 5                                          |
| <b>Average</b> | 90                                             | 35                                                       | 2           | 5                                          |

AverageFYSFR: 0.00

Assessment [ (5 \* 15) / AverageFYSFR]: 5.00

**8.2 Qualification of Faculty Teaching First Year Common Courses (5)**

Total Marks 5.00

| Year    | x (Number Of Regular Faculty with Ph.D) | y (Number Of Regular Faculty with Post graduate Qualification) | RF (Number Of Faculty Members required as per SFR of 20:1) | Assessment Of Faculty Qualification [ (5x + 3y) / RF ] |
|---------|-----------------------------------------|----------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------|
| 2019-20 | 27                                      | 35                                                             | 5                                                          | 48.00                                                  |
| 2020-21 | 29                                      | 38                                                             | 5                                                          | 51.00                                                  |
| 2021-22 | 31                                      | 38                                                             | 5                                                          | 53.00                                                  |

Average Assessment: 50.67

**8.3 First Year Academic Performance (10)**

Total Marks 6.62

Institute Marks : 6.62

| Academic Performance                                          | CAYm1( 2020-21 ) | CAYm2( 2019-20 ) | CAYm3 ( 2018-19 ) |
|---------------------------------------------------------------|------------------|------------------|-------------------|
| Mean of CGPA or mean percentage of all successful students(X) | 7.02             | 6.82             | 6.61              |
| Total Number of successful students(Y)                        | 596.00           | 619.00           | 578.00            |
| Total Number of students appeared in the examination(Z)       | 596.00           | 619.00           | 634.00            |
| API [X*(Y/Z)]                                                 | 7.02             | 6.82             | 6.03              |

Average API[ (AP1+AP2+AP3)/3 ] : 6.62

Assessment = Average API : 6.62

**8.4 Attainment of Course Outcomes of first year courses (10)**

Total Marks 10.00

**8.4.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcomes of first year is done (5)**

Institute Marks : 5.00

**Assessment Tools:****Continuous Internal Assessment (40 marks for theory courses, 50 marks for laboratory courses, projects and seminars)**

A teacher compiles the data of continuous internal (I and II) assessment in his/her subject. The teacher then enters the marks through the online software provided by the institute. Three hard copies are signed, one for examination section, one for department and one for self.

**Semester End Assessment (50 marks for all courses, 50 marks for laboratory courses, projects and seminars)**

The data of semester end assessment of a subject is compiled by internal and external teacher. The teacher then enters the marks through the online software provided by the institute. One hard copy is signed and is submitted to the institute. These records are maintained by examination section.

**Assignments/Quizzes/MCQs/Group Works (for 10 marks)**

Any or all of these may be used as decided by the respective course teacher. The teacher also decides the number of assignments, quizzes, MCQ based tests and group works during the semester.

Question Paper Pattern of Internal evaluation is as shown in below:

PART A



|        |          |                                                                            |                       |
|--------|----------|----------------------------------------------------------------------------|-----------------------|
| Q.No.1 | 10 Marks | Covers syllabus from Unit I and II for CIE-I, Unit-III and IV for CIE - II |                       |
| PART B |          |                                                                            |                       |
| Q.No.2 | 15 Marks | Covers syllabus from Unit – I for CIE – I, Unit- III for CIE-II            | Anyone to be answered |
| Q.No.3 | 15 Marks | Covers syllabus from Unit – I for CIE – I, Unit- III for CIE-II            |                       |
| Q.No.4 | 15 Marks | Covers syllabus from Unit – II for CIE – I, Unit- IV for CIE-II            | Anyone to be answered |
| Q.No.5 | 15 Marks | Covers syllabus from Unit – II for CIE – I, Unit- IV for CIE-II            |                       |

Question Paper Pattern for SEE examinations is as shown in below:

|                                                      |          |                                                                                                                |                       |
|------------------------------------------------------|----------|----------------------------------------------------------------------------------------------------------------|-----------------------|
| PART A                                               |          |                                                                                                                |                       |
| Q.No.1                                               | 20 Marks | Covers syllabus from Unit I, II, III and IV<br>Multiple choice questions/one mark questions/two mark questions |                       |
| PART B<br>(Maximum 4 sub-questions in each question) |          |                                                                                                                |                       |
| Q.No.2                                               | 20 Marks | Covers syllabus from Unit – I                                                                                  | Anyone to be answered |
| Q.No.3                                               | 20 Marks | Covers syllabus from Unit – I                                                                                  |                       |
| Q.No.4                                               | 20 Marks | Covers syllabus from Unit – II                                                                                 | Anyone to be answered |
| Q.No.5                                               | 20 Marks | Covers syllabus from Unit – II                                                                                 |                       |
| Q.No.6                                               | 20 Marks | Covers syllabus from Unit – III                                                                                | Anyone to be answered |
| Q.No.7                                               | 20 Marks | Covers syllabus from Unit – III                                                                                |                       |
| Q.No.8                                               | 20 Marks | Covers syllabus from Unit – IV                                                                                 | Anyone to be answered |
| Q.No.9                                               | 20 Marks | Covers syllabus from Unit – IV                                                                                 |                       |

The following method has been adopted for Attainment Levels for Continuous Internal Evaluation (CIE).

- Attainment Level 3:  $\geq 60\%$
- Attainment Level 2:  $\geq 40\%$
- Attainment Level 1:  $< 40\%$

The following method has been adopted for Attainment Levels for Semester End Examination(SEE).

- Attainment Level 3:  $\geq 60\%$
- Attainment Level 2:  $\geq 40\%$
- Attainment Level 1:  $< 40\%$

Target and Attainment of all course COs using Continuous Internal Evaluation (CIE) is as shown in table 3.1.

CO - Course Outcome    TGT - Target    ATM - Attainment

#### 8.4.2 Record the attainment of Course Outcomes of all first year courses (5)

Institute Marks : 5.00

Target and Attainment of COs using Continuous Internal Evaluation (CIE) is as shown in below:

| Continuous Internal Evaluation (CIE) |     |     |     |     |     |     |
|--------------------------------------|-----|-----|-----|-----|-----|-----|
| Course Code                          | CO1 | CO2 | CO3 | CO4 | CO5 | CO6 |

|                   | TGT   | ATM   | TGT   | ATM   | TGT   | ATM   | TGT   | ATM   | TGT   | ATM   | TGT   | ATM   |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>Semester 1</b> |       |       |       |       |       |       |       |       |       |       |       |       |
| UMA161C           | 40.00 | 41.00 | 40.00 | 35.00 | 40.00 | 46.00 | 40.00 | 51.00 | 40.00 | 67.00 | 40.00 | 52.00 |
| UPH162C           | 40.00 | 32.00 | 40.00 | 27.00 | 40.00 | 17.00 | 40.00 | 29.00 | 40.00 | 43.00 | 40.00 | 24.00 |
| UME163C           | 40.00 | 31.00 | 40.00 | 28.00 | 40.00 | 35.00 | 40.00 | 35.00 | --    | --    | --    | --    |
| UEE164C           | 40.00 | 49.00 | 40.00 | 15.00 | 40.00 | 38.00 | 40.00 | 18.00 | 40.00 | 23.00 | --    | --    |
| UCS165C           | 40.00 | 32.00 | 40.00 | 20.00 | 40.00 | 15.00 | 40.00 | --    | --    | --    | --    | --    |
| UPH166L           | 70.00 | 77.24 | 70.00 | 77.24 | 70.00 | 77.24 | 70.00 | 77.24 | --    | --    | --    | --    |
| UCS167L           | 70.00 | 76.17 | 70.00 | 76.17 | 70.00 | 76.17 | 70.00 | 76.17 | 70.00 | 76.17 | --    | --    |
| <b>Semester 2</b> |       |       |       |       |       |       |       |       |       |       |       |       |
| UMA261C           | 40.00 | 63.00 | 40.00 | 79.00 | 40.00 | 39.00 | 40.00 | 42.00 | 40.00 | 83.00 | 40.00 | 25.00 |
| UCH268C           | 40.00 | 28.00 | 40.00 | 25.00 | 40.00 | 45.00 | --    | --    | --    | --    | --    | --    |
| UEC269C           | 40.00 | 33.00 | 40.00 | 81.00 | 40.00 | 35.00 | 40.00 | 43.00 | 40.00 | 28.00 | 40.00 | 37.00 |
| UCV270C           | 40.00 | 33.00 | 40.00 | 35.00 | 40.00 | 25.00 | 40.00 | 38.00 | --    | --    | --    | --    |
| UME271L           | 70.00 | 84.10 | 70.00 | 84.10 | 70.00 | 84.10 | 70.00 | 84.10 | --    | --    | --    | --    |
| UCH272L           | 70.00 | 89.74 | 70.00 | 89.74 | 70.00 | 89.74 | 70.00 | 89.74 | --    | --    | --    | --    |

Target and Attainment of COs using Semester End Examination (SEE) is as shown in below:

| <b>Semester End Examination (SEE)</b> |                          |            |            |            |            |            |            |            |            |            |            |            |
|---------------------------------------|--------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| <b>Course Code</b>                    | <b>CO1</b>               |            | <b>CO2</b> |            | <b>CO3</b> |            | <b>CO4</b> |            | <b>CO5</b> |            | <b>CO6</b> |            |
|                                       | <b>TGT</b>               | <b>ATM</b> | <b>TGT</b> | <b>ATM</b> | <b>TGT</b> | <b>ATM</b> | <b>TGT</b> | <b>ATM</b> | <b>TGT</b> | <b>ATM</b> | <b>TGT</b> | <b>ATM</b> |
| <b>Semester 1</b>                     |                          |            |            |            |            |            |            |            |            |            |            |            |
| UMA161C                               | 40                       | 42         | 40         | 35         | 40         | 47         | 40         | 73         | 40         | 58         | 40         | 43         |
| UPH162C                               | 40                       | 22         | 40         | 28         | 40         | 23         | 40         | 21         | 40         | 26         | 40         | 16         |
| UME163C                               | 40                       | 26         | 40         | 23         | 40         | 29         | 40         | 27         | --         | --         | --         | --         |
| UEE164C                               | 40                       | 46         | 40         | 24         | 40         | 36         | 40         | 31         | 40         | 17         | 40         | 13         |
| UCS165C                               | 40                       | 36         | 40         | 23         | 40         | 27         | 40         | 24         | 40         | 34         | --         | --         |
| <b>Semester 2</b>                     |                          |            |            |            |            |            |            |            |            |            |            |            |
| UMA261C                               | Promoted due to pandemic |            |            |            |            |            |            |            |            |            |            |            |
| UCH268C                               |                          |            |            |            |            |            |            |            |            |            |            |            |
| UEC269C                               |                          |            |            |            |            |            |            |            |            |            |            |            |
| UCV270C                               |                          |            |            |            |            |            |            |            |            |            |            |            |
| UME271L                               |                          |            |            |            |            |            |            |            |            |            |            |            |
| UCH272L                               |                          |            |            |            |            |            |            |            |            |            |            |            |

Course Outcomes Attainment Levels is as shown in below:

| Course Code | Attainment of COs - CIE |     |     |     |     |     | Attainment of Cos - SEE  |     |     |     |     |     | Average Attainment Levels |     |     |     |     |     |
|-------------|-------------------------|-----|-----|-----|-----|-----|--------------------------|-----|-----|-----|-----|-----|---------------------------|-----|-----|-----|-----|-----|
|             | CO1                     | CO2 | CO3 | CO4 | CO5 | CO6 | CO1                      | CO2 | CO3 | CO4 | CO5 | CO6 | CO1                       | CO2 | CO3 | CO4 | CO5 | CO6 |
| C101.1      | 2                       | 1   | 2   | 2   | 3   | 2   | 2                        | 1   | 2   | 3   | 2   | 2   | 2                         | 1   | 2   | 2.5 | 2.5 | 2   |
| C101.2      | 1                       | 1   | 1   | 1   | 2   | 1   | 1                        | 1   | 1   | 1   | 1   | 1   | 1                         | 1   | 1   | 1   | 1.5 | 1   |
| C101.3      | 1                       | 1   | 1   | 1   | --  | --  | 1                        | 1   | 1   | 1   | --  | --  | 1                         | 1   | 1   | 1   | --  | --  |
| C101.4      | 2                       | 1   | 1   | 1   | 1   | --  | 2                        | 1   | 1   | 1   | 1   | --  | 2                         | 1   | 1   | 1   | --  | --  |
| C101.5      | 1                       | 1   | 1   | --  | --  | --  | 1                        | 1   | 1   | --  | --  | --  | 1                         | 1   | 1   | --  | --  | --  |
| C101.6      | 3                       | 3   | 3   | 3   | --  | --  | Promoted due to pandemic |     |     |     |     |     | 3                         | 3   | 3   | 3   | --  | --  |
| C101.7      | 3                       | 3   | 3   | 3   | 3   | --  |                          |     |     |     |     |     | 3                         | 3   | 3   | 3   | 3   | --  |
| C102.1      | 3                       | 3   | 1   | 2   | 3   | 1   |                          |     |     |     |     |     | 3                         | 3   | 1   | 2   | 3   | 1   |
| C102.2      | 1                       | 1   | 2   | --  | --  | --  |                          |     |     |     |     |     | 1                         | 1   | 2   | --  | --  | --  |
| C102.3      | 1                       | 3   | 1   | 2   | 1   | 1   |                          |     |     |     |     |     | 1                         | 3   | 1   | 2   | 1   | 1   |
| C102.4      | 1                       | 1   | 1   | 1   | --  | --  |                          |     |     |     |     |     | 1                         | 1   | 1   | 1   | --  | --  |
| C102.5      | 3                       | 3   | 3   | 3   | --  | --  |                          |     |     |     |     |     | 3                         | 3   | 3   | 3   | --  | --  |
| C102.6      | 3                       | 3   | 3   | 3   | --  | --  |                          |     |     |     |     |     | 3                         | 3   | 3   | 3   | --  | --  |

### 8.5 Attainment of Program Outcomes from first year courses (20)

Total Marks 20.00

#### 8.5.1 Indicate results of evaluation of each relevant PO and/or PSO if applicable (10)

Institute Marks : 10.00

#### POs Attainment:

| Course | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| C101.1 | 3   | 3   | 3   | 0   | 0   | 0   | 3   | 0   | 0   | 0    | 0    | 0    |
| C101.2 | 1   | 1   | 1   | 0   | 1   | 1   | 1   | 1   | 1   | 1    | 0    | 1    |
| C101.3 | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2   | 2    | 2    | 2    |
| C101.4 | 1   | 1   | 1   | 1   | 0   | 1   | 1   | 0   | 1   | 1    | 1    | 1    |
| C101.5 | 1   | 1   | 1   | 1   | 1   | 1   | 0   | 1   | 1   | 1    | 1    | 1    |
| C101.6 | 3   | 3   | 0   | 3   | 3   | 3   | 3   | 3   | 3   | 3    | 0    | 3    |
| C101.7 | 1   | 1   | 1   | 1   | 1   | 1   | 0   | 1   | 1   | 1    | 1    | 1    |
| C102.1 | 2   | 2   | 2   | 0   | 0   | 0   | 2   | 0   | 0   | 0    | 0    | 0    |
| C102.2 | 2   | 2   | 0   | 2   | 0   | 2   | 2   | 0   | 0   | 0    | 0    | 2    |
| C102.3 | 2   | 2   | 2   | 0   | 2   | 2   | 0   | 0   | 0   | 0    | 0    | 2    |
| C102.4 | 2   | 2   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 0    | 0    |
| C102.5 | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 0   | 3   | 3    | 0    | 3    |
| C102.6 | 3   | 3   | 0   | 0   | 0   | 3   | 3   | 3   | 0   | 0    | 0    | 3    |

**PO Attainment Level****PSOs Attainment:**

| Course | PSO1 | PSO2 | PSO3 |
|--------|------|------|------|
| C101.1 | 2    | 1    | 1    |
| C101.2 | 1    | 1    | 1    |
| C101.3 | 2    | 1    | 2    |
| C101.4 | 1    | 1    | 1    |
| C101.5 | 1    | 1    | 1    |
| C101.6 | 3    | 3    | 3    |
| C101.7 | 1    | 1    | 1    |
| C102.1 | 2    | 1    | 0    |
| C102.2 | 1    | 1    | 1    |
| C102.3 | 1    | 1    | 1    |
| C102.4 | 1    | 0    | 0    |
| C102.5 | 3    | 3    | 3    |
| C102.6 | 3    | 3    | 3    |

**PSO Attainment Level**

| Course            | PO1  | PO2 | PO3  |
|-------------------|------|-----|------|
| Direct Attainment | 1.69 | 1.5 | 1.64 |
| PSO Attainment    | 1.69 | 1.5 | 1.64 |

**8.5.2 Actions taken based on the results of evaluation of relevant POs and PSOs (10)**

Institute Marks : 10.00

**POs Attainment Levels and Actions for Improvement- (2020-21)**

| POs                                 | Target Level | Attainment Level | Observations |
|-------------------------------------|--------------|------------------|--------------|
| <b>PO 1 : Engineering Knowledge</b> |              |                  |              |
| PO 1                                | 2            | 2                | Satisfactory |

Action1: Target revised to 2.5 Action2: Conduct extra classes in basic science and engineering sciences courses. Action3: Solve more problems.

**PO 2 : Problem Analysis**

|      |   |   |              |
|------|---|---|--------------|
| PO 2 | 2 | 2 | Satisfactory |
|------|---|---|--------------|

Action1: Target revised to 2.5 Action2: Include ability enhancement courses

**PO 3 : Design/development of Solutions**

|      |   |   |              |
|------|---|---|--------------|
| PO 3 | 2 | 2 | Satisfactory |
|------|---|---|--------------|

Action1: Target revised to 2.5 Action2: Include ability enhancement courses

**PO 4 : Conduct Investigations of Complex Problems**

|      |   |   |              |
|------|---|---|--------------|
| PO 4 | 2 | 2 | Satisfactory |
|------|---|---|--------------|

Action1: Target revised to 2.5 Action2: Include ability enhancement courses

**PO 5 : Modern Tool Usage**

|      |   |   |              |
|------|---|---|--------------|
| PO 5 | 2 | 2 | Satisfactory |
|------|---|---|--------------|

Action1: Target revised to 2.5 Action2: Include skill enhancement courses.

**PO 6 : The Engineer and Society**

|      |   |   |              |
|------|---|---|--------------|
| PO 6 | 2 | 2 | Satisfactory |
|------|---|---|--------------|

Action1: Target revised to 2.5 Action2: AICTE has introduced 100 point activities

**PO 7 : Environment and Sustainability**

|      |   |   |              |
|------|---|---|--------------|
| PO 7 | 2 | 2 | Satisfactory |
|------|---|---|--------------|

Action1: Target revised to 2.5 Action2: AICTE has introduced 100 point activities

**PO 8 : Ethics**

|      |   |   |              |
|------|---|---|--------------|
| PO 8 | 2 | 2 | Satisfactory |
|------|---|---|--------------|

Action1: Target revised to 2.5 Action2: Adherence to institutional code of conduct and standards of professional bodies.

**PO 9 : Individual and Team Work**

|      |   |   |              |
|------|---|---|--------------|
| PO 9 | 2 | 2 | Satisfactory |
|------|---|---|--------------|

Action1: Target revised to 2.5 Action2: Conduct Science exhibitions in groups of students.

**PO 10 : Communication**

|       |   |   |              |
|-------|---|---|--------------|
| PO 10 | 2 | 2 | Satisfactory |
|-------|---|---|--------------|

Action1: Target revised to 2.5 Action2: Conduct presentations and seminars in some of the basic engineering courses.

**PO 11 : Project Management and Finance**

|       |   |   |              |
|-------|---|---|--------------|
| PO 11 | 2 | 1 | Not attained |
|-------|---|---|--------------|

Action1: Target is retained. Action2: Offering a course on Project Management Action3: Inclusion of finance management concepts

**PO 12 : Life-long Learning**

|       |   |   |              |
|-------|---|---|--------------|
| PO 12 | 2 | 2 | Satisfactory |
|-------|---|---|--------------|

Action1: Target revised to 2.5 Action2: Motivated to take online certification courses.

### PSOs Attainment Levels and Actions for Improvement- (2020-21)

| PSOs                                                                                                                                                                                         | Target Level | Attainment Level | Observations                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------|-------------------------------------------------------------------------|
| <b>PSO 1 : To demonstrate the abilities to apply the basic science and engineering fundamentals to solve complex engineering problems in the society.</b>                                    |              |                  |                                                                         |
| PSO 1                                                                                                                                                                                        | 1.5          | 1.69             | Target attained. Hence same procedures will be continued for next year. |
| Action1: Target revised to 1.75 Action2: Conduct guest lectures, seminars/webinars and SDPs for first year students                                                                          |              |                  |                                                                         |
| <b>PSO 2 : To demonstrate the abilities to provide information and communication technology solutions using modern engineering and IT tools at affordable cost working as a team member.</b> |              |                  |                                                                         |
| PSO 2                                                                                                                                                                                        | 1.5          | 1.54             | Target attained. Hence same procedures will be continued for next year. |
| Action1: Target revised to 1.75 Action2: Conduct awareness programmes and trainings on usage of modern tools. Action3: Use of ICT tools.                                                     |              |                  |                                                                         |
| <b>PSO 3 : To exhibit ethical, social and professional responsibilities and engage in life long learning.</b>                                                                                |              |                  |                                                                         |
| PSO 3                                                                                                                                                                                        | 1.5          | 1.69             | Target attained. Hence same procedures will be continued for next year. |
| Action1: Target revised to 1.75 Action2: adherence to Institutional codes and standards. Action3: Students are motivated to register online certification courses.                           |              |                  |                                                                         |

## 9 STUDENT SUPPORT SYSTEMS (50)

Total Marks 50.00

### 9.1 Mentoring system to help at individual level (5)

Total Marks 5.00

Institute Marks : 5.00

#### Type of mentoring:

Professional guidance/career advancement/course work specific/ laboratory specific/total development:

#### Total developmet (Mentoring covers all types of guidance):

|                               |   |                                                     |
|-------------------------------|---|-----------------------------------------------------|
| Number of faculty members     | : | All the faculty in each programme                   |
| Number of students per mentor | : | Approximately 10 students from each year            |
| Frequency of meeting          | : | Scheduled once in every 15 days and also need based |

In each program, every faculty is assigned 10 students in an academic year. The students interact with the faculty advisor at least once in 15 days. This also facilitates the pre-registration guidance and enables students to take right courses and appropriate electives. The faculty encourages the students to discuss their ideas and problems in person. The faculty keeps track of the attendance and progress of the students assigned to him. All the details of the students are maintained by the faculty. The same information is reported to the HoD/Principal along with necessary measures taken. They also provide advice on career matters. This has created a healthy and congenial atmosphere on the campus.

### 9.2 Feedback analysis and reward /corrective measures taken, if any (10)

Total Marks 10.00

**A.The Feedback methodology****Feedback Process Exist: Yes**

At the end of every, semester feedback is collected through an online process system from **all the students** for **all the courses**.

**Feedback Analysis Process:**

The suggestions are analyzed by the concerned HOD. Every question has a weightage up to 10 points. Based on the average points accrued for all the questions the faculty performance level is assessed.

The performance of the teacher is graded as below:

|                    |   |                                                                                           |
|--------------------|---|-------------------------------------------------------------------------------------------|
| More than 8 points | : | Excellent                                                                                 |
| From 6 to 8        | : | Good                                                                                      |
| From 5 to 6        | : | Average                                                                                   |
| Below 5            | : | The teacher is subjected for any corrective measures as decided by Head of the Department |

**System of reward:**

Performance rating of faculty through student feedback system is one of the factors in evaluating the annual performance of the faculty. Based on the feedback received from the students the faculty is rewarded by issuing a letter of appreciation from the Head of the Department during the annual day function of the department.

**B. Corrective Measures:****i) Faculty**

- The teachers who secure a grade less than 5.0 are counseled by the HOD on how to improve the teaching-learning process. Both study the metrics and the method for effective teaching is charted out, for improvement.
- Continuing education programs are conducted for the faculty.
- The faculty is deputed for training in their subject domain.

**ii) Students**

Counseling is done for identified weak students. Remedial classes are conducted.

**iii) Course contents**

If suggested by the faculty the modification of the course contents is thought and discussed in the faculty meetings and carried to the consent of BOS.

Number of corrective actions taken in the last three years: **Nil**

The most common source of input to teaching evaluation is feedback from students. Appraisal and feedback have a strong positive influence on teachers and their work. Feedback system has increased teachers job satisfaction.

**9.3 Feedback on facilities (5)**

Total Marks 5.00

Institute Marks : 5.00

At the end of every year, feedback on facilities is taken in the below given format. Every question will be evaluated on a scale of 1 to 5. The feedback is analyzed by internal committee. Any improvements in the facilities required are taken with the permission of the administration/management. A sample format of feedback form is as shown in below:



B. V. V. Sangha's  
Basaveshwar Engineering College (Autonomous), Bagalkot  
Department of Information Science and Engineering

## FACILITIES

### Rate your response

1. The Ambience of laboratories & class rooms of the department

a. Not at all      b. Marginally Satisfactory      c. Satisfactory      d. Excellent

2. Computing facilities in the department

a. Not at all      b. Marginally Satisfactory      c. Satisfactory      d. Excellent

3. Reprographic facilities

a. Not at all      b. Marginally Satisfactory      c. Satisfactory      d. Excellent

4. Internet connectivity (wifi/wired)

a. Not at all      b. Marginally Satisfactory      c. Satisfactory      d. Excellent

5. Department library (availability)

a. Not at all      b. Marginally Satisfactory      c. Satisfactory      d. Excellent

6. Drinking Water

a. Not at all      b. Marginally Satisfactory      c. Satisfactory      d. Excellent

Name:

Signature

USN:



**A. Scope for self-learning**

Self-learning is promoted through various activities viz. assignments, seminars and project work. Assignments on various topics, group tasks, hobby projects, seminars on recent topics by students, guest lectures are different modes through which self-learning is facilitated. Students are also encouraged towards self-learning through personal counseling and organizing various contests.

**To facilitate self-learning the following activities are incorporated in curriculum:**

- The pre-final and final year students have to give seminars on latest topics/technologies
- Each course has 5 marks weightage for assignments/Quizes/seminars.
- Mini projects/Projects have to be carried out at the third and final year level.
- NPTEL/SWAYAM/Coursera/Webinars/Seminars, etc.

**B. The institution provides the following facilities for learning beyond syllabus:**

- Campus wide Wi-fi facility is setup. This facilitates learning beyond college hours.
- The reading room is kept open up to 10 pm.
- A digital library is setup to facilitate online access of the information.
- Course material and laboratory manuals are provided.
- Invited talks, Seminars, workshops on latest technologies/tools are organized
- Motivating the students to participate in inter-college events for paper presentation, technical fests and project exhibitions with financial assistance.
- Quiz competitions and group discussions are organized for students
- NPTEL (National Project on Technology Enhanced Learning): Access to online learning material prepared by IIT and other esteemed institutions is hosted on institution server.
- QEEE (Quality Enhancement in Engineering Education): Online classes from IIT faculty are accommodated within the curriculum and telecast live to students.
- BOSCH REXROTH (Centre for industrial automation): The objective of the center is to train UG/PG students towards industrial automation and enhance placement opportunities.
- INTEL Intelligent Systems Laboratory: An exclusive lab is set up in association with INTEL to carry out innovative projects.
- Nokia Innovation Lab: Simulating lab for next generation mobile networks.
- SCADA Lab: Centralized campus wide load monitoring facility is created for analyzing the power distribution/consumption.
- Institute is registered as member of National Digital Library (NDL).
- Institute is registered as a member of DELNET
- 5000 CDs are mirrored in the server for supporting curriculum activities and learning beyond syllabus.
- Virtual laboratory facility has been deployed in the campus.
- Facilities are created in the library for MHRD initiatives like Swayam, Shakshat, Shodhaganga and Shodhasindhu.

**9.5 Career Guidance, Training, Placement (10)**

Total Marks 10.00

Institute Marks : 10.00

**Placement Cell Activities:**

HRD training program is conducted from 1<sup>st</sup> year onwards. The institution also arranges through placement cell the training on communication skills, programming and domain specific areas. Industry-Institution Partnership Cell (IIPC) and Entrepreneurship Development Cell (EDC) are set-up to facilitate internship and organize Entrepreneurship awareness programmes. Campus training is conducted for final year/pre-final year students to assist students to identify the right choice for the career advancement. The placement cell also organizes alumni meets, Guest lectures etc.

**Counseling for Higher Studies:**

Faculty counselors motivate the students to pursue higher studies and also take up competitive exams. The college arranges coaching classes for students appearing GATE exams and entrance exams for defence services.

**9.6 Entrepreneurship Cell**

Total Marks 5.00

**Entrepreneurship cell:**

India's future depends critically on its ability to compete fully in the creative economy - not just in technology and software. Today innovation is a key behind technological development. Campuses are the right places to breed innovation. The emphasis in present university system of technical education is not focused on innovation and entrepreneurship. A need was felt to create awareness amongst the students about "Entrepreneurship as a career option" hence EDC was set up in March 2006.

Since the inception of EDC, every week a training programme is conducted on various aspects of entrepreneurship. These activities have enhanced the capabilities of the students during placement.

**Objectives:**

1. To instill "Entrepreneurship as a Career Option" for BECIans.
2. To build Entrepreneurial capabilities through training.
3. To groom BECIans in product development and linking the same to academic projects.
4. To incubate Entrepreneurial activities.
5. To support young Entrepreneurs through Techno-managerial activities.

**Impact:**

1. A Competitive atmosphere is created amongst students
2. Awareness and a positive attitude is developed about entrepreneurship
3. Students have become aware of the realities and challenges of venture initiation

**Incubation facility:**

With Industry-Institution interaction on the uphill the academic institutions are making an effort to have incubation centres on the campuses to encourage entrepreneurship skills. The BEC campus has set up the following incubation centres:

**i) BEC STEP**

Incubation facility is provided by the Science and Technology Entrepreneurs Park (STEP) which works under the aegis of BEC. About 25 virtual incubates per year are utilizing the Technology Business Incubator (TBI) facilities in the following areas:

1. Food processing
2. Textile ( handloom and power loom)
3. Building technology

**ii) BEC BOSCH Rexroth Centre for industrial automation**

The centre consists of 20 systems, hydraulic and pneumatic kits, PLC machines and associated software, Motion Drive Controller etc. The objective of the centre is to train UG/PG students towards industrial automation. About 300 students have been trained till date.

**iii) INTEL Intelligent Systems Laboratory**

The lab consists of 20 atom processor kits.UG/PG students are utilizing the lab facilities to do the course assignments and project works.

**iv) New age incubation centre in Engineering Colleges through KBITS, Government of Karnataka.**

An MOU with Karnataka Biotechnology and Information Technology Services, Government of Karnataka is signed and an incubation centre is set up on campus. The main objective of the scheme is to promote students, research scholars and alumni in implementing their ideas by taking up innovative projects.

**9.7 Co-curricular and Extra-curricular Activities**

Total Marks 10.00

Institute Marks : 10.00

Besides curricular activities, students are engaged in co-curricular and extracurricular activities. This is normally done by students associations and student chapters at various department levels and the college Gymkhana. Co-curricular and extra-curricular activities provide opportunities for students to explore new fields of interest, cultivate leadership skills, and build teamwork qualities. All the students participate in a wide-range of activities which currently include the publishing of weekly news letter, developing, nurturing artistic skills. Participation in technical contests viz. quizzes, paper presentation contests, project exhibitions etc. Most of these activities are initiated by the students and are engaged in developing a dynamic culture, fostering collaboration and cooperation on campus.

**Co-curricular activities:**

1. Each department has a student association/chapter. Every year the co-curricular activities will be organized through these associations. By participating in co-curricular activities students continue to apply the academic knowledge learnt in the classroom to enhance their individual traits.
2. In addition every year institute arranges a national level technical student symposium "SPECTRUM" which comprises many events related to Computer Science, Electronics & Communication, Electrical & Electronics, Civil and Mechanical disciplines.

Table 9.1. Departments Students Associations

| Programme | Name of the Association |
|-----------|-------------------------|
|-----------|-------------------------|

|                                             |                                                                |
|---------------------------------------------|----------------------------------------------------------------|
| Automobile Engineering                      | Automobile Engineering Students Association (AES)              |
| Biotechnology                               | BT-Zillion                                                     |
| Civil Engineering                           | Association of Civil Engineers (ACE)                           |
| Computer Science and Engineering            | Forum Of Computer Undergraduate Students (FOCUS)               |
| Electronics & Communication Engineering     | Association for Communication and Modern Electronics (ACME)    |
| Electrical and Electronics Engineering      | Electrical and Electronics Engineering Association (EEEE)      |
| Industrial Production Engineering           | Production and Engineering Students Association (PESA)         |
| Information Science & Engineering           | RISE (Rays of Information Science and Engineering)             |
| Electronics and Instrumentation Engineering | Instrumentation Technology Students Association (ITSA)         |
| Mechanical Engineering                      | Mechanical Engineering Association (MEA)                       |
| MBA                                         | Basaveshwar Engineering Management students Association(BEMSA) |
| MCA                                         | Society of Professionals applying Computer Knowledge (SPARK)   |

### IEEE BEC Chapter

IEEE actively conducts co-curricular as well as extracurricular activities. The chapter also organizes a state level event, “NOVUS” every year. It includes many events like programming contests, paper presentation contest, project exhibition etc.

### Extra-Curricular Activities

Extra curricular activities are organized through NSS , Students club and etc.

#### NSS Activities

National Service Scheme (NSS) at BEC has organized many blood donation camps. It maintains the record of individuals who are willing to donate blood. NSS volunteers visit nearby villages affected by natural calamities and assist in distributing milk and bread and also participate in road construction works. Every year on June 5<sup>th</sup> it celebrates “World Environment Day” by planting saplings.

#### MindHog (Students club)

MindHog is a student club selected under AICTE – SPICES scheme with a financial support of Rs. 2 lakhs (1 lakh by AICTE and 1 lakh by BEC, Bagalkot) for developing **students club** for well-rounded development of students by promoting their interests, creativity and ethics. A lot of activities for pursuit of individual interests, creative work, showcasing talent, networking and teamwork opportunities, social experience; organization and management skills, exposure to professional ethics etc.

#### Gymkhana

Various extracurricular activities are organized by Gymkhana association. The activities include:

1. Sports week is celebrated by organizing various outdoor events like Cricket, Football, Volleyball, Basketball, Athletics and indoor events like Chess, Carom and Table Tennis etc. Winners are awarded medals on Annual Day.
2. On Annual Day every year cultural events will be performed by the students. The program is aimed in encouraging the students to excel in several intrinsic arts.

Enclosure-Gymkhana reports:

#### Gymkhana Report 2018-2019

- The selection of class representatives and gymkhana office bearers based on the merit was held in the month of September 2018.
- Gymkhana started the activity by celebrating Gandhi Jayanti on 2nd Oct 2018.
- Gymkhana also organized a talk on “Narcotic Drugs and their effects” on 06/10/2018 for students.
- Karnataka Rajastova, was celebrated on 1<sup>st</sup> Nov 2018.
- Bharat Ratna Dr. B R Ambedkar Jayanthi was celebrated on 14<sup>th</sup> April 2019.
- In association with all the departments, gymkhana organized Inter Department College level Technical Fest FUSION-2K19 on 12<sup>th</sup> and 13<sup>th</sup> April 2019. During this event around 500 students participated to exhibit their talents in various technical activities.
- Mr. Amrut D. Bhat & Mr. Pavankumar of Biotechnology Department won 3<sup>rd</sup> Prize state level BioQuiz held as part of Bengaluru Tech Summit on 19<sup>th</sup> November 2018.
- Ms. Suprita Revankar and Ms. Shwetha Shirol of Biotechnology Department won cash prize of Rs. 5000 in Anveshana Project Exhibition organized by Agastya Foundation, Bangalore during 25<sup>th</sup> to 27<sup>th</sup> February 2019.
- Ms Suman H Malagar and Ms Rushali Patil of Biotechnology Department won best paper award at National Seminar on New trends in biotechnology held at BIET, Davanagere.
- Deepak Kulkarni, D Teja, and Dheeraj Warkar of Computer Science and Engineering Department won 2<sup>nd</sup> prize in paper presentation held at KLE Technological University, Hubli on 11/1/19.
- Snehal M K and Sahil Hanagi of Computer Science and Engineering Department won 2<sup>nd</sup> prize in Techathon held at KLE Technological University, Hubli on 11/1/19.
- Snehal M K and Sahil Hanagi of Computer Science and Engineering Department won 2<sup>nd</sup> prize in event “To be Denny Ritchie” held at KLE Engineering College, Chikkodi on 03/1/19.
- Sahil Hanagi and Kiran M of Computer Science and Engineering Department won 1<sup>st</sup> prize in event “Bug C” held at SDMCET Dharwad on 19/04/19.

- Kiran M and Ankita H of Computer Science and Engineering Department won 1<sup>st</sup> prize in event “IT Quiz” held at VDIIT Haliyal on 19/04/19.
- Rohit S of Computer Science and Engineering Department won 2<sup>nd</sup> prize in event “Tech Kirti” held at IIT Kanpur on 19/04/19.
- Rohit Hemadri and Rahul Vasanad of Computer Science and Engineering Department won 1<sup>st</sup> prize in event “Coding (Techthon) in Advitiya2018” held at KLEIT Hubli during 28<sup>th</sup> to 29<sup>th</sup> September 2018.
- Rahul Vasanad of Computer Science and Engineering Department awarded as “Young Scientist Award 2019” for Andriod and Java App Development by Think & Ink Company Bangalore
- Pramod B Ukkali of Computer Science and Engineering Department won 1<sup>st</sup> prize in event “Coding & Debugging” held at Sanjay Godawat Institute of Technology Kolhapur on 23/01/19.
- Pramod B Ukkali of Computer Science and Engineering Department won 1<sup>st</sup> prize in event “Coding & Debugging” held at SKSVMACET Laxmeshwar on 12/01/19.
- Prajwal Kumar and Namrata Patil of Industrial and Production Engineering department won 2<sup>nd</sup> prize in event “EMage (Business Quiz)” held at SIT Tumkur during 08/3/19 to 10/3/19.
- Abdul Jamadar Khadar and Ananda kundagol of MBA department won 2<sup>nd</sup> prize in event “Galacto 2K19 Human Resource Management” held at Global Business School Hubli during 14<sup>th</sup> to 16<sup>th</sup> April 2019.
- Shreya Tadasad and Geeta Nagur of MBA department won 2<sup>nd</sup> prize in event “Finomania 2K19” held at KLE IMSR Hubli on 8<sup>th</sup> March 2019.
- Nikita Upadhye of Electronics and Communication Engineering Department won 1<sup>st</sup> prize in event “Paper presentation” Shrishti 2018 held at Dayananad College of Engineering Bangalore during 22<sup>nd</sup> to 24<sup>th</sup> May 2018
- This year from our college around 50 students were participated in VTU Youth fest for various events held at BKIT, Bhalki
- Our college has won 7 medals and 5 trophies at VTU Zonal intercollegiate tournament. And also our 3 students have selected as VTU Blues in various games.
- The college Badminton Team women teams have won the Runners up Trophy in VTU Gulbarga zone organized at GNDEC Bidar.
- Our Throw ball Team won the Runners up Trophy in VTU Gulbarga zone organized at PDIT Hospet.
- College Hand Ball Team are the winners in VTU Gulbarga zone organized at our college.
- Our College Hockey Team is the winner in VTU Gulbarga zone organized at our college.
- First time, our college Archery Team won the Runners up Trophy in VTU Gulbarga zone organized at SDM College of Engineering and Technology, Dharwad.
- Mr. Manjunath of Mechanical Engineering Department won the silver medal in VTU state level Russeling held at Nagarjuna College of Engineering, Bangalore
- Ms. Laxmi of Information Science and Engineering Department won the Bronze medal in VTU state level Toykando held at Nagarjuna College of Engineering, Bangalore
- Ms. Sahana Kulkarni is selected as VTU Blue in KHo Kho Game.
- Mr. Shivabasu is selected as VTU Blue in Hockey Game.
- Mr. Shivabasu and Mr. Shivakumar M. are selected as VTU Blues in Hockey Game.
- Ms. Aishwarya Halagali bagged gold and silver medals in 100 mts. Hurdle and long jump.
- Mr. Mahesh is selected as VTU Blue in Floor Ball Game.
- We have hosted VTU Gulbarga Zonal Inter Collegiate Throw Ball and Hockey Tournament.

#### Gymkhana Activities (2020-2021)

- Gymkhana started the activity by celebrating Gandhiji Jayanti and Lal Bahadur Shastri Jayanti on 2<sup>nd</sup> October 2020
- Karnataka Rajyotsava, was celebrated on 1<sup>st</sup> November 2020
- Mr. Pavan Simikeri (MBA Dept.), Ms. Savita Halli (MBA Dept.), and Ms. Supriya (Civil Engg.) have won the Bronze medal in National Level Wushu Championship at Mohali, Punjab on 02.03.2021
- Bharat Ratna Dr. B. R. Ambedkar Jayanthi was celebrated on 14<sup>th</sup> April 2020
- BEC Cricket team won runners up position in Bagalkot Youth Premiur League 2021 on 12.04.2021 organized by L.Lyod's Sports Foundation Bagalkot in association with Cricket Academy Bagalkot
- International Yoga Day 2021 was conducted on 21.06.2021 from 7.00 am to 8.00 am in Online and Offline mode

## 10 GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES (120)

Total Marks 120.00

### 10.1 Organization, Governance and Transparency (55)

Total Marks 55.00

#### 10.1.1 State the Vision and Mission of the Institute (5)

Institute Marks : 5.00

##### Vision

To be recognized as a premier technical institute committed to developing exemplary Professionals, offering research based innovative solutions and inspiring inventions for holistic socio-economic development.

##### Mission

- To pursue excellence through student centric dynamic teaching-learning processes, encouraging freedom of inquiry and openness to change.
- To carry out innovative cutting edge research and transfer technology for industrial and societal needs.
- To imbibe moral and ethical values and develop compassionate, humane professionals

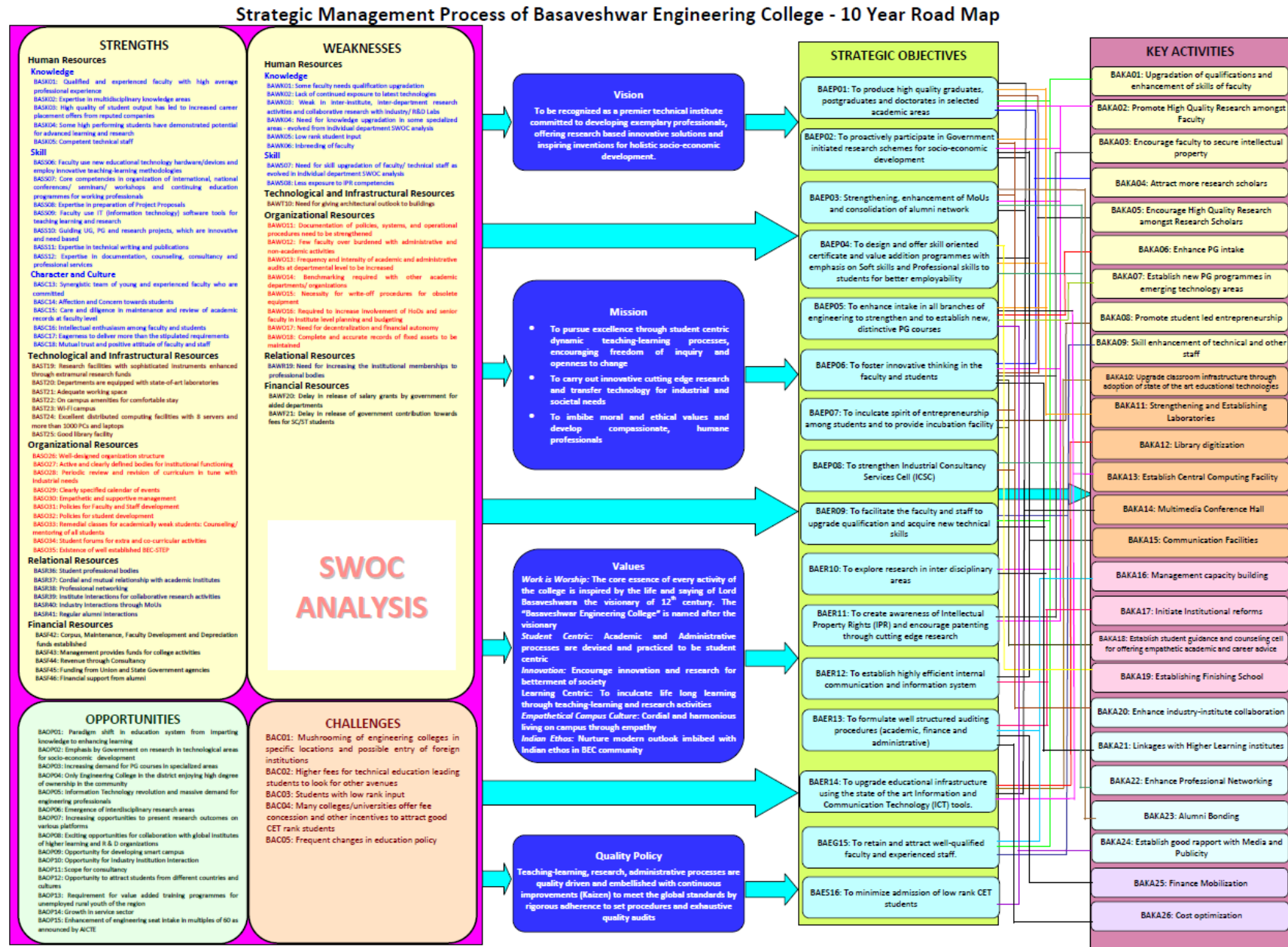
#### 10.1.2 Availability of the Institutional Strategic Plan and its Effective Implementation and Monitoring (25)

Institute Marks : 25.00

Yes - <https://becbgk.edu/Strategic-Plan-BEC.pdf> (<https://becbgk.edu/Strategic-Plan-BEC.pdf>)

An extensive SWOC Analysis of the institution has been carried out and the details of analysis are provided herewith. Resource centric approach is adopted for SWOC analysis (Strengths, Weaknesses, Opportunities, and Challenges) to evolve a comprehensive strategic plan for institutional development. The five resources are Human, Organizational, Technological & Infrastructural, Relational and Financial. Strengths and Weaknesses are considered as internal while Opportunities and Challenges as external.

The institutional strategic plan is as shown below:



### 10.1.3 Governing body, administrative setup, functions of various bodies, service rules, procedures, recruitment and promotional policies (10)

Institute Marks : 10.00

List the governing, senate, and all other academic and administrative bodies; their memberships, functions, and responsibilities; frequency of the meetings; and attendance therein, in a tabular form. A few sample minutes of the meetings and action-taken reports should be annexed.

The published rules including service rules, policies and procedures; year of publication shall be listed. Also state the extent of awareness among the employees/students.

The college has the following committees to ensure proper management of academic, financial and general administrative affairs.

The following are the statutory bodies:

1. Governing Body
2. Governing Council
3. Academic Council
4. Board of Studies
5. Finance Committee
6. Board of Appointments
7. Library Committee

#### Governing Body:

The major functions of the BOG include:

1. Taking all policy decisions and overall management of Institutions
2. Form, supervise, guide and approve proposals of various committees such as Academic Committee, Finance Committee, Building and Works Committee and Purchase Committee etc.
3. Reviewing institution progress and giving guidance for achieving goals and targets
4. Developing strategies for creating the ambience for excellence
5. Suggesting measures for enhancing reach and effectiveness of services to community and industry
6. Ensuring institutional accountability and compliance with policy reforms.
7. To oversee proper utilization of fund and submission of regular reimbursement claims
8. To perform all other functions related to the fulfillment of the objectives of the college.

Governing Body meetings are held once in every 3 months. The structure of the Governing Body is shown below table 10.1.

**Table 10.1. Structure of the Governing Body: Private Management Aided/ Unaided**

| Number                                   | Category                                  | Nature                                                                                                     |
|------------------------------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------------|
| 3 Members, one of them to be Chairperson | Educationist, Industrialist, Professional | Nominated by the State Government. Persons of proven academic interest with atleast PG level qualification |
| 2 Members                                | Faculty of the institution                | Nominated by the Principal based on Seniority                                                              |
| 1 Member                                 | Educationist or Industrialist             | Nominated by the Principal based on Seniority for 2 years                                                  |
| 1 Member                                 | UGC Nominee                               | Nominated by the UGC                                                                                       |
| 1 Member                                 | State Government nominee                  | Nominated by the State Government                                                                          |
| 1 Member                                 | University Nominee                        | Nominated by the University                                                                                |
| 1 Member                                 | Principal of the Institution              | Ex-officio                                                                                                 |

Sample minutes of the Governing Body meetings held:

Enclosure- Minutes-BoG- 31-12-2020



**BASAVESHWAR ENGINEERING COLLEGE (AUTONOMOUS)**  
BAGALKOT- 587 103

**Technical Education Quality Improvement Programme - III (TEQIP-III)**

**27<sup>th</sup> BOARD OF GOVERNORS MEETING**

**AGENDA**

Following agenda to be discussed during the 27<sup>th</sup> Board of Governors (BoG) meeting (online) of Basaveshwar Engineering College (Autonomous), Bagalkot" scheduled on 31.12.2020 at 11.30 am through "Google Meet

|                 |                                                                                                                                                                                                                                                                                              |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Sub (1)</b>  | : To confirm the minutes of the previous BoG meeting held on 26.09.2020                                                                                                                                                                                                                      |
| <b>Sub (2)</b>  | : To appraise of activities/events conducted/organized and the progress made from 01.07.2020 to 30.12.2020                                                                                                                                                                                   |
| <b>Sub (3)</b>  | : Seeking post facto approval for procurement of Goods/Equipment's upon release of additional grants<br>a) Laptops, b) All in One Computers, c) Interactive panels and accessories, d) Desktop Computers and e) Digital Teaching Device: Virtulive                                           |
| <b>Sub (4)</b>  | : a) Seeking post-facto approval for STTPs/Workshops/Conferences/Training programs attended by Faculty/Staff/Students from 01.07.2020 to 30.12.2020<br>b) Seeking post-facto approval for FDPs/SDPs/Workshops/Symposiums/offline and online webinars organized from 01.07.2020 to 30.12.2020 |
| <b>Sub (5)</b>  | : Seeking post-facto approval for Industry Institute Interaction programs organized and attended by faculty/students from 01.07.2020 to 30.12.2020                                                                                                                                           |
| <b>Sub (6)</b>  | : Seeking post-facto approval for Equity Assurance Plan (EAP) programs organized from 01.07.2020 to 30.12.2020                                                                                                                                                                               |
| <b>Sub (7)</b>  | : Seeking post-facto approval for providing Research Assistantship (RA) to research scholars                                                                                                                                                                                                 |
| <b>Sub (8)</b>  | : Seeking post-facto approval for conducting Employability Skill Test from 17-20 Dec., 2020 for 2 <sup>nd</sup> , 3 <sup>rd</sup> and 4 <sup>th</sup> year students conducted by Aspiring Minds, as per NPIU guidelines                                                                      |
| <b>Sub (9)</b>  | : Seeking financial approval for expenditure incurred from 01.07.2020 to 31.12.2020 under a) Procurement, b) Academic Activities, c) Operation & Maintenance (O&M) and d) Mentoring/Twinning Systems                                                                                         |
| <b>Sub (10)</b> | : Seeking post-facto approval for the implementation of AICTE 7 <sup>th</sup> pay scale for teaching staff (Aided) applicable from 01.01.2016                                                                                                                                                |
| <b>Sub (11)</b> | : Seeking post-facto approval for appointment of following faculty members for various administrative posts                                                                                                                                                                                  |

| Sl. No. | Name of Faculty         | Position                      |
|---------|-------------------------|-------------------------------|
| 1.      | Dr. P. N. Kulkarni      | Dean Academic                 |
| 2.      | Dr. Veena Soragavi      | Dean R&D                      |
| 3.      | Dr. R. B. Khadiranaikar | Dean Student Welfare          |
| 4.      | Dr. P. G. Rakaraddi     | HoD Dept. of Civil Engg.      |
| 5.      | Dr. S. S. Kuntoji       | HoD Dept. of E&CE             |
| 6.      | Dr. M. S. Hebbal        | HoD Dept. of Mechanical Engg. |
| 7.      | Dr. S. G. Kambalimath   | Placement Officer             |
| 8.      | Dr. Shreelata R. Rao    | HoD Dept. of MBA              |
| 9.      | Dr. C. M. Javalagi      | Assistant Placement Officer   |





**BASAVESHWAR ENGINEERING COLLEGE (AUTONOMOUS)**  
BAGALKOT- 587 103

B. V. V. S

**Technical Education Quality Improvement Programme - III (TEQIP-III)**

|                   |                                                                                                                                                                                                                                                                                                    |                          |                                                   |                                   |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------------------------------------------|-----------------------------------|
| <b>Sub (12) :</b> | Seeking approval for five months maternity leave from 21.10.2020 to 21.03.2021to Mrs. Sangeeta Mulgund, Research Scholar, Dept. of Civil Engg.                                                                                                                                                     |                          |                                                   |                                   |
| <b>Sub (13) :</b> | Seeking approval for the sanction of time bound increments for the following supporting staff:                                                                                                                                                                                                     |                          |                                                   |                                   |
|                   | <b>Sl. No.</b>                                                                                                                                                                                                                                                                                     | <b>Name of the staff</b> | <b>Designation and department</b>                 | <b>Number of years of service</b> |
|                   | 1.                                                                                                                                                                                                                                                                                                 | Shri. Raghavendra Dhage  | Helper (Aided), Mechanical Engineering Department | 20 years                          |
|                   | 2.                                                                                                                                                                                                                                                                                                 | Shri. M. M. Savanur      | Helper (Aided), Civil Engineering Department      | 25 years                          |
| <b>Sub (14) :</b> | Seeking approval for considering application of Dr. H. M. Kadlimatti, Assistant Professor (Aided), Mechanical Engineering Department for promotion to the post of Professor and increase in the AGP from Rs. 9000 to Rs. 10,000                                                                    |                          |                                                   |                                   |
| <b>Sub (15) :</b> | Seeking approval for promotion of Dr. S. S. Balli, Associate Professor (Aided), Mechanical Engineering Department to the post of Professor                                                                                                                                                         |                          |                                                   |                                   |
| <b>Sub (16) :</b> | Seeking approval for release of AGP to Dr. A. H. Agadi, Assistant Professor (Aided), Mathematics Department and Sri. B. R. Endigeri, Assistant Professor (Aided), Mechanical Engineering Department based on report submitted by AGP Scrutiny Committee                                            |                          |                                                   |                                   |
| <b>Sub (17) :</b> | Seeking approval for the release of withheld increments upon completion of PhD to Dr. S. M. Parshiyavar, Associate Professor, Industrial and Production Engineering Department                                                                                                                     |                          |                                                   |                                   |
| <b>Sub (18) :</b> | Seeking approval for appointment on compensatory basis of Sri. Amit Y. Walikar, s/o Late Y. S. Walikar                                                                                                                                                                                             |                          |                                                   |                                   |
| <b>Sub (19) :</b> | Seeking approval for release of AGP to Dr. S. H. Sanni, Dr. R. V. Kurahatti, Shri S. C. Yali, Dr. V. V. Kuppast, Agadi, Shri G. H. Rathod, and Dr. M. C. Goudar based on report submitted by AGP Scrutiny Committee                                                                                |                          |                                                   |                                   |
| <b>Sub (20) :</b> | Seeking approval for transfer of Dr. D. D. Chillal, Associate Professor (Unaided), from Industrial and Production Engineering Department to Automobile Engineering Department                                                                                                                      |                          |                                                   |                                   |
| <b>Sub (21) :</b> | Seeking approval for the sanction of leave without pay up to 31/12/2020 to Smt. Pallavi S. Sureban, SDA (Unaided), Accounts section                                                                                                                                                                |                          |                                                   |                                   |
| <b>Sub (22) :</b> | Seeking approval for the merger of following departments from the academic year 2021-22,<br>a) Automobile Engineering Department with Mechanical Engineering Department and<br>b) Electronics and Instrumentation Engineering Department with Electronics and Communication Engineering Department |                          |                                                   |                                   |
| <b>Sub (23) :</b> | Seeking approval for increase in intake from 90 to 120 from the academic year 2021-22,<br>a) Computer Science and Engineering<br>b) Information Science and Engineering                                                                                                                            |                          |                                                   |                                   |
| <b>Sub (24) :</b> | Seeking approval for the appointment of Chairman of AGP Scrutiny Committee                                                                                                                                                                                                                         |                          |                                                   |                                   |
| <b>Sub (25) :</b> | Seeking approval for release of withheld increments to Dr. G. M. Hiremath, Associate Professor (Aided), Civil Engineering Department upon completion of PhD                                                                                                                                        |                          |                                                   |                                   |
| <b>Sub (26) :</b> | Seeking approval for the withdrawal of AGP to Dr. S. H. Sanni, and Dr. R. V. Kurahatti based on the request received from the faculty members                                                                                                                                                      |                          |                                                   |                                   |
| <b>Sub (27) :</b> | Seeking approval for considering the apology letter submitted by Dr. S. N. Kurbet, Rtd. Placement Officer (Professor), Mechanical Engineering Department for processing the Pension                                                                                                                |                          |                                                   |                                   |
| <b>Sub (28) :</b> | Any other matter with the permission of Chair                                                                                                                                                                                                                                                      |                          |                                                   |                                   |

  
Prof. S. B. Gudimov, Chairman





**BASAVESHWAR ENGINEERING COLLEGE (AUTONOMOUS)**  
BAGALKOT- 587 103

**Technical Education Quality Improvement Programme - III (TEQIP-III)**

**27<sup>th</sup> BOARD OF GOVERNORS MEETING**

**RESOLUTIONS OF THE BOG MEETING HELD ON 31.12.2020**

Resolutions of the 27<sup>th</sup> Board of Governors meeting (TEQIP-III) held online on 31.12.2020 at 11:00 am through "Google Meet"

|                 |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Sub. (1)</b> | : | To confirm the minutes of the previous BoG meeting held on 26.09.2020                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Res.</b>     |   | The minutes of the previous BOG meeting held on 26.09.2020 were presented by Principal to the BoG members and it was resolved to approve the same [Annexure I]                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Sub. (2)</b> | : | To apprise of activities/events conducted/organized and the progress made from 27.09.2020 to 30.12.2020                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Res.</b>     |   | Major activities/events of the College and TEQIP – III conducted from 27.09.2020 to 30.12.2020 was presented by Principal to the Board members (Annexure II). The Board members congratulated Principal & Faculty for the progress made in TEQIP-III and for being awarded 2 patents to the college.                                                                                                                                                                                                                                                                                                           |
| <b>Sub. (3)</b> | : | Seeking ratification for procurement of Goods/Equipment's upon release of additional grants<br>a) Laptops, b) All in One Computers, c) Interactive panels and accessories, d) Desktop Computers and e) Digital Teaching Device: Virtulive                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Res.</b>     |   | Based on the performance made by the college, NPIU/SPIU had informed that an additional grant of 10% of PLA will be sanctioned (10% of 7.70 crores = Rs. 77 lakhs) to the college and had sought for the action plan. Owing to COVID19 the classes were to be in online mode, hence it was planned to strengthen the teaching learning process by purchasing a) Laptops, b) All in One Computers, c) Interactive panels and accessories, d) Desktop Computers and e) Digital Teaching Device: Virtulive. The Board members approved the same in total for an estimated cost of Rs. 93.00 lakhs [Annexure III]. |
| <b>Sub. (4)</b> | : | Seeking ratification for STTPs/Workshops/Conferences/Training programs attended by Faculty/Staff/Students from 01.07.2020 to 30.12.2020, b) Seeking post-facto approval for FDPs/SDPs/Workshops/Symposiums/offline and online webinars organized from 01.07.2020 to 30.12.2020                                                                                                                                                                                                                                                                                                                                 |
| <b>Res.</b>     |   | The details of i) 1 Training programme attended by faculty and 1 workshop attended by student, ii) 9 conferences attended by faculty and 2 conferences by students, b) 12 FDPs/SDPs/Workshops/Symposiums/offline and online webinars organized was presented to board members and it was resolved to approve the same. [Annexure IV]                                                                                                                                                                                                                                                                           |
| <b>Sub. (5)</b> | : | Seeking ratification for Industry Institute Interaction programs organized and attended by faculty/students from 01.07.2020 to 30.12.2020                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Res.</b>     |   | 2 students who attended the internship at industries from 01.07.2020 to 30.12.2020 was presented by Principal to Board members and it was resolved to approve the same [Annexure V].                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Sub. (6)</b> | : | Seeking post-facto approval for Equity Assurance Plan (EAP) programs organized from 01.07.2020 to 30.12.2020                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Res.</b>     |   | The details of 8 Equity Assurance Plan (EAP) organized by faculty members was presented to board members and it was resolved to approve the same [Annexure V].                                                                                                                                                                                                                                                                                                                                                                                                                                                 |



**BASAVESHWAR ENGINEERING COLLEGE (AUTONOMOUS)**  
BAGALKOT- 587 103

**Technical Education Quality Improvement Programme - III (TEQIP-III)**

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Res.</b>        | The five months maternity leave request letter submitted by Mrs. Sangeeta Mulgund, Research Scholar, Dept. of Civil Engg. was presented to board members and it was resolved to approve the same.                                                                                                                                                                                                                                                                                                                      |
| <b>Sub. (13) :</b> | Seeking approval for sanction of time bound increments for the following supporting staff:<br>1. Shri. Raghavendra Dhage, Helper (Aided), Mechanical Engineering Department, 20 years<br>2. Shri. M. M. Savanur, Helper (Aided), Civil Engineering Department, 25 years                                                                                                                                                                                                                                                |
| <b>Res.</b>        | Shri. Raghavendra Dhage, Helper (Aided), Mechanical Engineering Department and Shri. M. M. Savanur, Helper (Aided), Civil Engineering Department were eligible for time bound increments based on the length of service. The same was presented to board members and it was resolved to approve the same and the Principal was informed to forward the applications to DTE, Bangalore for approval.                                                                                                                    |
| <b>Sub. (14) :</b> | Seeking approval for consideration of application of Dr. H. M. Kadlimatti, Assistant Professor (Aided), Mechanical Engineering Department for promotion to the post of Professor and increase in the AGP from Rs. 9,000 to Rs. 10,000                                                                                                                                                                                                                                                                                  |
| <b>Res.</b>        | Dr. H. M. Kadlimatti, Assistant Professor (Aided), Mechanical Engineering Department had submitted an application for promotion to the post of Professor and increase in the AGP from Rs. 9,000 to Rs. 10,000. The board members informed the Principal to follow the norms as per GoK/AICTE for promotion to the post of Professor, however for increase in the AGP from Rs. 9,000 to Rs. 10,000 the application to be forwarded to DTE, Bangalore upon verification of documents by the Internal Scrutiny Committee. |
| <b>Sub. (15) :</b> | Seeking approval for promotion of Dr. S. S. Balli, Associate Professor (Aided), Mechanical Engineering Department to the post of Professor                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Res.</b>        | Dr. S. S. Balli, Associate Professor (Aided), Mechanical Engineering Department had submitted an application for promotion to the post of Professor. The board members informed the Principal to follow the norms as per GoK/AICTE for promotion to the post of Professor.                                                                                                                                                                                                                                             |
| <b>Sub. (16) :</b> | Seeking approval for discussion on report submitted by AGP Scrutiny Committee regarding the release of AGP to Dr. A. H. Agadi, Assistant Professor (Aided), Mathematics Department and Sri. B. R. Endigeri, Assistant Professor (Aided), Mechanical Engineering Department                                                                                                                                                                                                                                             |
| <b>Res.</b>        | The AGP Scrutiny Committee had submitted a report to the Principal with regards to the verification of documents required for increase in AGP. The same was presented to the Board members and it was resolved to approve the same.                                                                                                                                                                                                                                                                                    |
| <b>Sub. (17) :</b> | Seeking approval for consideration of application of Dr. S. M. Parshiyavar, Associate Professor, Industrial and Production Engineering Department for the release of withheld increments upon completion of PhD                                                                                                                                                                                                                                                                                                        |
| <b>Res.</b>        | Dr. S. M. Parshiyavar, Associate Professor, Industrial and Production Engineering Department had submitted an application for the release of withheld increments upon completion of PhD. The Board members approved the same and informed the Principal to release the withheld increments from the date of his completion of PhD, upon approval from competent authority.                                                                                                                                             |
| <b>Sub. (18) :</b> | Seeking approval for consideration of application of Amit Y. Walikar, S/o Late Y. S. Walikar for appointment on compensatory basis                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Res.</b>        | Mr. Amit Y. Walikar, S/o Late Y. S. Walikar had submitted an application for appointment on compensatory basis. The same was presented to the Board members and the members                                                                                                                                                                                                                                                                                                                                            |



B. V. V. S

**BASAVESHWAR ENGINEERING COLLEGE (AUTONOMOUS)**  
**BAGALKOT- 587 103**
**Technical Education Quality Improvement Programme - III (TEQIP-III)**

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                    | committee was to be appointed as the Chairman. The same was brought to the notice of Board members and it was resolved to appoint Dr. K. Chandrashekar as the Chairman of the AGP scrutiny committee.                                                                                                                                                                                                                                                                                                                            |
| <b>Sub. (25) :</b> | Seeking approval for release of withheld increments to Dr. G. M. Hiremath, Associate Professor (Aided), Civil Engineering Department upon completion of PhD                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Res.</b>        | Dr. G. M. Hiremath, Associate Professor (Aided), Civil Engineering Department had submitted an application for the release of withheld increments upon completion of PhD. The Board members approved the same and informed the Principal to release the withheld increments from the date of his completion of PhD, upon approval from competent authority.                                                                                                                                                                      |
| <b>Sub. (26) :</b> | Seeking approval for the withdrawal of AGP to Dr. S. H. Sanni, and Dr. R. V. Kurahatti based on the request received from the faculty members                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Res.</b>        | The Board informed the Principal to discuss the matter with the Legal Advisors of the college and take appropriate measures based on the suggestions given by Legal Advisors.                                                                                                                                                                                                                                                                                                                                                    |
| <b>Sub. (27) :</b> | Seeking approval for considering the apology letter submitted by Dr. S. N. Kurbet, Rtd. Placement Officer (Professor), Mechanical Engineering Department for processing the Pension                                                                                                                                                                                                                                                                                                                                              |
| <b>Res.</b>        | The Principal apprised the Board members the reason for initiating action against Dr. S. N. Kurbet, Rtd. Placement Officer (Professor), Mechanical Engineering Department based upon the letter from DTE Bangalore. However, Dr. S. N. Kurbet, Rtd. Placement Officer (Professor), Mechanical Engineering Department submitted apology letter and requested for processing the Pension papers. Upon discussion the Board members informed the Principal to discuss the matter with Legal Advisors and take appropriate measures. |
| <b>Sub. (28) :</b> | Any other matter with the permission of Chair.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Res.</b>        | No other matters came for the discussion and the online meeting was concluded with vote of thanks proposed by Dr. S. G. Kambalimath TEQIP-III coordinator to the Chair and all honourable BoG members.                                                                                                                                                                                                                                                                                                                           |

  
 Prof. S. R. Gudisagar  
 Chairman  
 Board of Governors, TEQIP-III, BEC  
 BAGALKOT – 587 103

Enclosure-Minutes- BoG- 26-03-2021



B. V. V. S

**BASAVESHWAR ENGINEERING COLLEGE (AUTONOMOUS)**  
**BAGALKOT- 587 103**
**Technical Education Quality Improvement Programme - III (TEQIP-III)**
**28<sup>th</sup> BOARD OF GOVERNORS MEETING**
**AGENDA**

Following agenda to be discussed during the 28<sup>th</sup> Board of Governors (BoG) meeting (online) of Basaveshwar Engineering College (Autonomous), Bagalkot scheduled on 26.03.2021 at 11:30 am through "Google Meet".

| Sub. (1)  | :                     | To confirm the minutes of the 27 <sup>th</sup> BoG meeting held on 31.12.2020                                                                                                                                                                                                                                                                                                                                                                               |                            |                   |                            |                            |   |                       |                        |          |   |                     |                         |          |
|-----------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------|----------------------------|----------------------------|---|-----------------------|------------------------|----------|---|---------------------|-------------------------|----------|
| Sub. (2)  | :                     | To apprise of the activities/events conducted/organized and the progress made during 01.01.2021 to 25.03.2021                                                                                                                                                                                                                                                                                                                                               |                            |                   |                            |                            |   |                       |                        |          |   |                     |                         |          |
| Sub. (3)  | :                     | Seeking post facto approval for procuring Goods/Equipment's<br>a) Seeking post facto approval for procurement of Servers (02 Nos.) for implementation of ERP SAMARTH Software<br>b) Seeking post facto approval for re-initiation of two times cancelled package (Gem RA Number: GEM/2020/RA/58665, Dated: 12.12.2020 and Gem RA Number: GEM/2020/RA/60493, Dated: 29.12.2020) of Interactive panels and Accessories (12 Nos.) for online teaching learning |                            |                   |                            |                            |   |                       |                        |          |   |                     |                         |          |
| Sub. (4)  | :                     | Seeking post-facto approval for STTPs/Workshops/Conferences/Training programs attended online/offline by Faculty/Staff/Students from 01.01.2021 to 25.03.2021                                                                                                                                                                                                                                                                                               |                            |                   |                            |                            |   |                       |                        |          |   |                     |                         |          |
| Sub. (5)  | :                     | a) Seeking post-facto approval for Equity Assurance Plan (EAP) programs organized from 01.01.2021 to 25.03.2021<br>b) Seeking post-facto approval for Remedial classes conducted for students during 01.01.2021 to 25.03.2021<br>c) Seeking post-facto approval for NASSCOM future skill training conducted for students                                                                                                                                    |                            |                   |                            |                            |   |                       |                        |          |   |                     |                         |          |
| Sub. (6)  | :                     | Seeking post facto approval for payment of patent fees towards filing IPR of Electrical and Electronics department                                                                                                                                                                                                                                                                                                                                          |                            |                   |                            |                            |   |                       |                        |          |   |                     |                         |          |
| Sub. (7)  | :                     | Seeking post-facto approval for providing Research Assistantship to Research Scholars                                                                                                                                                                                                                                                                                                                                                                       |                            |                   |                            |                            |   |                       |                        |          |   |                     |                         |          |
| Sub. (8)  | :                     | Seeking post-facto approval for providing financial assistance to faculty and students registered and completed online NPTEL/ MOOCs courses                                                                                                                                                                                                                                                                                                                 |                            |                   |                            |                            |   |                       |                        |          |   |                     |                         |          |
| Sub. (9)  | :                     | Seeking financial approval for expenditure incurred from 01.03.2021 to 25.03.2021 under a) Procurement, b) Academic Activities, c) Operation & Maintenance (O&M) and d) Mentoring/Twinning Systems                                                                                                                                                                                                                                                          |                            |                   |                            |                            |   |                       |                        |          |   |                     |                         |          |
| Sub. (10) | :                     | Seeking approval for the sanction of time bound increments for the following non-teaching staff: <table><tr><th>Sl. No.</th><th>Name of the staff</th><th>Designation and department</th><th>Number of years of service</th></tr><tr><td>1</td><td>Shri B. R. Chiniwalar</td><td>Typist (Aided), Office</td><td>20 years</td></tr><tr><td>2</td><td>Shri C. I. Kundargi</td><td>Helper (Aided), Physics</td><td>20 years</td></tr></table>                  | Sl. No.                    | Name of the staff | Designation and department | Number of years of service | 1 | Shri B. R. Chiniwalar | Typist (Aided), Office | 20 years | 2 | Shri C. I. Kundargi | Helper (Aided), Physics | 20 years |
| Sl. No.   | Name of the staff     | Designation and department                                                                                                                                                                                                                                                                                                                                                                                                                                  | Number of years of service |                   |                            |                            |   |                       |                        |          |   |                     |                         |          |
| 1         | Shri B. R. Chiniwalar | Typist (Aided), Office                                                                                                                                                                                                                                                                                                                                                                                                                                      | 20 years                   |                   |                            |                            |   |                       |                        |          |   |                     |                         |          |
| 2         | Shri C. I. Kundargi   | Helper (Aided), Physics                                                                                                                                                                                                                                                                                                                                                                                                                                     | 20 years                   |                   |                            |                            |   |                       |                        |          |   |                     |                         |          |
| Sub. (11) | :                     | Seeking approval for delegation of signing authority of CL/EL/DL of teaching and supporting staff and bonafide certificates of students to Dean (Academic)                                                                                                                                                                                                                                                                                                  |                            |                   |                            |                            |   |                       |                        |          |   |                     |                         |          |
| Sub. (12) | :                     | Seeking approval for scrapping of E-waste (old Computers & Peripherals) and Furniture sanctioned under AICTE/DST etc. / Blue Books                                                                                                                                                                                                                                                                                                                          |                            |                   |                            |                            |   |                       |                        |          |   |                     |                         |          |
| Sub. (13) | :                     | Seeking approval for the appointment of Electrical Development Officer                                                                                                                                                                                                                                                                                                                                                                                      |                            |                   |                            |                            |   |                       |                        |          |   |                     |                         |          |



B. V. V. S

**BASAVESHWAR ENGINEERING COLLEGE (AUTONOMOUS)**  
**BAGALKOT- 587 103**
**Technical Education Quality Improvement Programme - III (TEQIP-III)**

|           |                                                                                                                                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sub. (14) | : Seeking approval for appointments on compensatory basis in Aided departments                                                                                                                           |
| Sub. (15) | : Presentation of Committee Opinion on Merger of departments i) Automobile Engineering with Mechanical Engineering and ii) Electronics & Instrumentation with Electronics and Communication Engineering. |

Prof. S. R. Gudisagar  
Chairman  
Board of Governors, TEQIP-III, BEC  
BAGALKOT – 587 103

**Governing Council:**

BEC has a governing council in place wherein the members are drawn from the members of the trust.

The functions of Governing Council are:

1. Frame directive principles and policies.
2. Amend and approve policies from time to time
3. Approve budgets
4. To look after the overall development of institute
5. Mobilize external resources to strengthen the institute

The structure of Governing Council is shown in below table 10.2.

**Table 10.2. The structure of Governing Council**

| Sl. No | Particulars           | Number | Designation      |
|--------|-----------------------|--------|------------------|
| 1      | Chairman of the trust | 01     | Chairman         |
| 2      | Members of the trust  | 10     | Member           |
| 3      | Principal             | 01     | Member Secretary |

**Academic council:**

The curriculum framed by the Board of Studies (BOS) of each programme is to be approved in the academic council meeting. Academic council meetings are conducted annually. During the meeting the Program Educational Objectives (PEO) of each programme are also reviewed.

The functions of Academic Council are:

1. Scrutinize and approve the minutes of the Board of Studies with or without modification with regard to courses of study, academic regulations, curricula, syllabi and modifications, it has the right to return the matter for reconsideration to the Board of Studies concerned or reject it, after assigning appropriate reasons.
2. Recommend to the Governing Body proposals for institution of new programmes of study.
3. Recommend to the Governing Body institution of scholarships, prizes and medals, and to frame regulations for the award of the same.
4. Perform such other functions as may be assigned by the Governing Body.

The structure of Academic council is as shown below table 10.3.

**Table 10.3. The structure of Academic council**

| Sl. No | Particulars                                                                                 | No.       | Designation      |
|--------|---------------------------------------------------------------------------------------------|-----------|------------------|
| 01     | Principal of the College                                                                    | 01        | Chairman         |
| 02     | All Heads of the Department                                                                 | All heads | Members          |
| 03     | Teachers of the College representing different level of teaching staff                      | 04        | Members          |
| 04     | Experts from outside the college representing areas such as industry, R&D, Tech. Education. | 04        | Members          |
| 05     | Nominees of University (VTU)                                                                | 03        | Members          |
| 06     | Senior Faculty Member                                                                       | 04        | Member Secretary |

**Enclosure-Minutes-Academic-Council-24-07-2021**

**BASAVESHWAR ENGINEERING COLLEGE (AUTONOMOUS), BAGALKOT****Proceedings of 17<sup>th</sup> Academic Council Meeting**24<sup>th</sup> July 2021

Time: 4.30 pm

Venue: Blended (Online + Offline)  
Online (MS-Teams)

|                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The Chairman of Academic Council Dr. S. S. Injaganeri, Principal, Basaveshwar Engineering College extended a hearty welcome to all the members of the Academic council. |                                                                                                                                                                                                                                                                                                                                                                                                               |
| Sub. (1) :                                                                                                                                                              | Seeking approval for the minutes of 16 <sup>th</sup> Academic Council Meeting held on 01.01.2021                                                                                                                                                                                                                                                                                                              |
| Res. :                                                                                                                                                                  | The Chairman presented the minutes of the 16 <sup>th</sup> Academic Council Meeting held on 01.01.2021. The members confirmed the minutes of the meeting. (Annexure - I)                                                                                                                                                                                                                                      |
| Sub. (2) :                                                                                                                                                              | To apprise of the college activities from 02.01.2021 to 23.07.2021                                                                                                                                                                                                                                                                                                                                            |
| Res. :                                                                                                                                                                  | The Chairman briefly presented the college activities from 02.01.2021 to 23.07.2021. The members appreciated the performance and expressed their happiness. (Annexure-II)                                                                                                                                                                                                                                     |
| Sub. (3) :                                                                                                                                                              | To present results of B.E. for the Academic Year 2020-2021 (before makeup Exams of III, V, VII Semesters), M.Tech (III Sem.), MBA (III Sem.) and MCA (V Sem.)                                                                                                                                                                                                                                                 |
| Res. :                                                                                                                                                                  | The Controller of Examinations (CoE) presented the results for the academic year 2020-2021 for the following programmes (before make up exams): <ul style="list-style-type: none"> <li>i. B.E. - III, V &amp; VII Semesters</li> <li>ii. M. Tech. - III Semester</li> <li>iii. MBA - III Semester</li> <li>iv. MCA - V Semester</li> </ul> The council approved the results presented by CoE (Annexure - III) |
| Sub. (4) :                                                                                                                                                              | Seeking approval for proceedings of the Joint Board Meetings (JBMs) held on 24.03.2021 and 22.05.2021                                                                                                                                                                                                                                                                                                         |
| Res. :                                                                                                                                                                  | The Chairman presented the proceedings of joint board meetings held on 24.03.2021 and 22.05.2021. After the discussion, it was resolved to approve the proceedings of joint board meetings. (Annexure-IV)                                                                                                                                                                                                     |
| Sub. (5) :                                                                                                                                                              | Seeking approval for proceedings of Board of Studies (BoS) meetings of all departments for B.E., M.Tech. & MBA programmes for the Academic Year 2021-2022                                                                                                                                                                                                                                                     |
| Res. :                                                                                                                                                                  | The Chairman presented the proceedings of BoS meetings of all the departments. After the discussion it was resolved to approve the proceedings of BoS meeting of all                                                                                                                                                                                                                                          |

**Signatures of Academic Council Members**

|                             |                             |                             |                                  |                         |
|-----------------------------|-----------------------------|-----------------------------|----------------------------------|-------------------------|
| Dr. S. S. Injaganeri        | Dr. P. N. Kulkarni          | Dr. Veena Soragavi          | Dr. R. B. Khadiranaikar          | Dr. K. Chandrasekhar    |
| Prof. M. S. Mohan Kumar     | Prof. Madhu N. Belur        | Prof. B. Annappa            | Shri. R. S. Rajkumar             | Dr. T. V. Ravi          |
| Prof. G. R. Doddagoudar     | Prof. Sreedhara S. Heshadri | Shri. Madhukar Manik D. Ube | Dr. P. G. Rakaraddi              | Dr. M. S. Hebballi      |
| Dr. S. H. Jangamshetti      | Dr. V. B. Pagl              | Dr. K. Shridar              | Dr. V. S. Purank                 | Dr. K. Bhat             |
| Dr. (Smt) Bharati S. Meti   | Dr. (Smt) S. R. Patil       | Dr. A. D. Devanagavi        | Dr. (Smt) Jayashri G. Ghantimath | Dr. P. L. Timmanagoudar |
| Dr. S. S. Benchalli         | Smt. Vidya Hunagund         | Dr. (Smt) Rashmi Hunnur     | Shri. B. S. Haravi               | Dr. S. G. Kambalimath   |
| Dr. (Smt) Bharati M. Reshmi | Dr. B. F. Ronad             |                             |                                  | Dr. V. G. Akkimagudi    |



|           |                                                                                                                                                                                                                                                                                        |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           | departments for B.E., M.Tech., and MBA programmes for the academic year 2021 - 2022 (Annexure-V)                                                                                                                                                                                       |
| Sub. (6)  | : Seeking approval for B.E. I/II semester scheme and syllabus for the Academic Year 2021-2022                                                                                                                                                                                          |
| Res.      | : The Chairman presented the scheme and syllabus of B.E. I/II semesters for the academic year 2021-2022. After discussion the scheme and syllabus of B.E. I/II semesters for the Academic year 2021-2022 was approved. (Annexure-VI)                                                   |
| Sub. (7)  | : Seeking approval for implementation of regulations governing the degree of MBA and M.Tech programmes from the Academic Year 2021-2022<br>[i] Ref: VTU/BGM/OS-Aca/Cirs/2020-21/12, dated:01.04.2021, ii) Ref: VTU/BGM/Aca-OS-Cirs/2021-22/104, dated:06.04.2021]                      |
| Res.      | : The Chairman presented the details of VTU Notifications related to implementation of regulations governing the degree of MBA and M.Tech programmes. After the discussion it was resolved to approve and implement the regulations from the Academic Year 2021-2022. (Annexure - VII) |
| Sub. (8)  | : Seeking approval for the regulations governing: <ul style="list-style-type: none"> <li>• B.E.</li> <li>• M.Tech</li> <li>• M.B.A.</li> <li>• PG-Diploma</li> </ul> Programmes for the Academic Year 2021-2022                                                                        |
| Res.      | : The Chairman presented BEC regulations for the Academic Year 2021 – 2022 for B.E., M.Tech., M.B.A., and PG-Diploma programmes. After the discussion it was resolved to approve the regulations for the academic year 2021-2022. (Annexure-VIII)                                      |
| Sub. (9)  | : Seeking approval for students qualified for the Certificate Course in Nutraceuticals and Food Processing for the academic year 2020-2021                                                                                                                                             |
| Res.      | : The Controller of Examinations presented the list of students qualified for the Certificate Course in Nutraceuticals and Food Processing for the academic year 2020-2021 and it was resolved to approve and recommended for the award of course certificate. (Annexure - IX)         |
| Sub. (10) | : Seeking approval for conducting Odd & Even semester Classes and CIE through online mode for the Academic Year 2020-2021, owing to Covid-19 Pandemic                                                                                                                                  |
| Res.      | : The Chairman presented the calendar of events for the Odd & Even semester of the Academic Year 2020-2021 and procedure employed for conduction of online classes & CIE to the members. After the discussion it was resolved to approve the conduction of                             |

| Signatures of Academic Council Members |                            |                            |                                 |                         |  |  |  |
|----------------------------------------|----------------------------|----------------------------|---------------------------------|-------------------------|--|--|--|
| Dr. S. S. Injaganeri                   | Dr. P. N. Kulkarni         | Dr. Veena Soragavi         | Dr. R. B. Khadiranaikar         | Dr. K. Chandrasekhar    |  |  |  |
| Prof. M. S. Mohan Kumar                | Prof. Madhu N. Belur       | Prof. B. Annappa           | Shri. R. S. Rajkumar            | Dr. T.V. Ravi           |  |  |  |
| Prof. G. R. Doddagoudar                | Prof. Sreedhara S heshadri | Shri. Madhukar Manik D ube | Dr. P.G. Rakaraddi              | Dr. M. S. Hebbal        |  |  |  |
| Dr. S. H. Jangamshetti                 | Dr. V. B. Pagi             | Dr. K. Shridar             | Dr. V. S. Purank                | Dr. K. Bhat             |  |  |  |
| Dr. (Smt) Bharati S. Meti              | Dr. (Smt) S. R. Patil      | Dr. A D Devanagavi         | Dr. (Smt) Jayashri G. Ghanimath | Dr. P. L. Timmanagoudar |  |  |  |
| Dr. S. S. Benchalli                    | Smt. Vidya Hunagund        | Dr. (Smt) Rashmi Hunnur    | Shri. B. S. Haravi              | Dr. S. G. Kambalimath   |  |  |  |
| Dr. (Smt) Bharati M Reshmi             | Dr. B. F. Ronad            |                            |                                 | Dr. V. G. Akkimar       |  |  |  |

Enclosure-Minutes-Academic-Council-20-11-2021

## BASAVESHWAR ENGINEERING COLLEGE (AUTONOMOUS), BAGALKOT


Proceedings of 18<sup>th</sup> Academic Council Meeting20<sup>th</sup> Nov. 2021

Time: 08.30 AM


































Venue: Multimedia Seminar Hall

|            |                                                                                                                                                                                                                                                 |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Subject    | : Seeking approval for the list of students qualified for the award of B.E., M.Tech., MBA and MCA degrees during the academic year 2020-2021.                                                                                                   |
| Resolution | It is resolved to approve the list of students qualified for the award of B.E., M.Tech., MBA and MCA degrees during the academic year 2020-2021 as presented by Controller of Examination and recommended to forward the same to VTU, Belagavi. |

  
Member Secretary  
[ Dr. V. G. Akkimardi ]

  
Principal

## Signatures of Academic Council Members

|                           |                                                                                   |                           |                                                                                    |                           |                                                                                     |                                  |                                                                                     |                        |                                                                                     |
|---------------------------|-----------------------------------------------------------------------------------|---------------------------|------------------------------------------------------------------------------------|---------------------------|-------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------|
| Dr. S. S. Injaganeri      |  | Dr. P. N. Kulkarni        |  | Dr. Veena Soragavi        |  | Dr. R. B. Khadirasaikar          |  | Dr. K. Chandrasekhar   |  |
| Prof. M. S. Mohan Kumar   |  | Prof. Madhu N. Belur      |  | Prof. B. Annappa          |  | Shri. R. S. Rajkumar             |  | Dr. T. V. Ravi         |  |
| Prof. G. R. Doddagoudar   |  | Prof. Sreedhara Sheshadri |  | Shri. Madhukar Manik Dube |  | Dr. P. G. Rakaraddi              |  | Dr. M. S. Hebhal       |  |
| Dr. S. H. Jangamshetti    |  | Dr. V. B. Pagi            |  | Dr. K. Shridar            |  | Dr. V. S. Puranik                |  | Dr. K. Bhat            |  |
| Dr. (Smt) Bharati S. Meti |  | Dr. (Smt) S. R. Patil     |  | Dr. A. D. Devanagavi      |  | Dr. (Smt) Jayashri G. Ghantimath |  | Dr. P. L. Timmanagouda |  |
| Dr. S. S. Benchalli       |  | Smt. Vidya Hunagund       |  | Dr. (Smt) Rashmi Hunnur   |  | Shri. B. S. Haravi               |  | Dr. S. G. Kambalimath  |  |
| Dr. Bharati Resmi         |  | Dr. B. F. Ronad           |  |                           |                                                                                     |                                  |                                                                                     | Dr. V. G. Akkimardi    |  |



|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             | Odd and Even semester Classes and CIE through online/offline mode for the Academic Year 2020-2021, owing to Covid-19 Pandemic.                                                                                                                                                                                                                                                                                                                                                                                          |
| Sub. (11) : | Seeking approval for conduction of supplementary semester Classes, CIE and Internships through online/offline mode for the Academic Year 2020-2021, owing to Covid-19 Pandemic                                                                                                                                                                                                                                                                                                                                          |
| Res. :      | The Chairman presented the calendar of events for supplementary semester of the Academic Year 2020-2021. After the discussion it was resolved to approve the conduction of supplementary semester Classes, CIE and Internships through online/offline mode for the Academic Year 2020-2021, owing to Covid-19 Pandemic                                                                                                                                                                                                  |
| Sub. (12) : | Seeking approval for providing open choice in SEE theory examinations for the Regular and Reregistered subjects of Even semester students of UG/PG for the Academic Year 2020-2021 [Ref: VTU/BOS/A9/2020-21/1155, dated: 08.07.2021]                                                                                                                                                                                                                                                                                    |
| Res. :      | The Chairman presented the details of VTU circular related to making provision for open choice in SEE theory examinations for the Regular and Reregistered subjects of even semester students of UG/PG for the Academic Year 2020-2021. After the discussion it was resolved to approve the open choice option for SEE theory examinations for the Regular and Reregistered subjects of even semester students of UG/PG for the Academic Year 2020-2021 as one-time benefit, owing to Covid-19 Pandemic. (Annexure - X) |
| Sub. (13) : | Seeking approval for offering Kannada subjects (Samskruthika Kannada and Balake Kannada) as one credit course for B.E. III/IV semesters from the Academic Year 2020-2021 onwards [Ref: VTU/Aca/A-9/2020-21/2110, dated: 04.09.2020]                                                                                                                                                                                                                                                                                     |
| Res. :      | The Chairman presented the details of VTU circular related to offering Kannada subjects (Samskruthika Kannada and Balake Kannada). After the discussion it was resolved to approve and include Kannada subjects as one credit course for B.E. III/IV semesters from the Academic Year 2020-2021 onwards. (Annexure - XI)                                                                                                                                                                                                |
| Sub. (14) : | Seeking approval for offering English for Engineers as one credit course to B.E. I/II semesters from the Academic Year 2021-2022 onwards                                                                                                                                                                                                                                                                                                                                                                                |
| Res :       | The Chairman presented the proposal of offering English for Engineers as one credit course to B.E. I/II semesters from the Academic Year 2021-2022 onwards and it was resolved to approve the English course for Engineers as one credit course to B.E. I/II semesters from the Academic Year 2021-2022 onwards.                                                                                                                                                                                                        |
| Sub. (15) : | Seeking approval for offering Universal Human Values (UHV) as a mandatory course to B.E. V/VI semesters for the Academic Year 2021-2022 [Ref: F.No.AICTE/IPC/2020/93, dated: 19.02.2020]                                                                                                                                                                                                                                                                                                                                |

Signatures of Academic Council Members

|                             |                             |                            |                                  |                         |
|-----------------------------|-----------------------------|----------------------------|----------------------------------|-------------------------|
| Dr. S. S. Injaganeri        | Dr. P. N. Kulkarni          | Dr. Veena Soragavi         | Dr. R. B. Khadiranaikar          | Dr. K. Chandrasekhar    |
| Prof. M. S. Mohan Kumar     | Prof. Madhu N. Belur        | Prof. B. Annappa           | Shri. R. S. Rajkumar             | Dr. T.V. Ravi           |
| Prof. G. R. Doddagoudar     | Prof. Sreedhara S. heshadri | Shri. Madhukar ManikD. ube | Dr. P.G. Rakaraddi               | Dr. M. S. Hebhal        |
| Dr. S. H. Jangamshetti      | Dr. V. B. Pagi              | Dr. K. Shridar             | Dr. V. S. Puranik                | Dr. K. Bhat             |
| Dr. (Smt) Bharati S. Meti   | Dr. (Smt) S. R. Patil       | Dr. A.D. Devanagavi        | Dr. (Smt) Jayashri G. Ghantimath | Dr. P. L. Timmanagoudar |
| Dr. S. S. Benchalli         | Smt. Vidya Hunagund         | Dr. (Smt) Rashmi Hunnur    | Shri. B. S. Haravi               | Dr. S. G. Kambalimath   |
| Dr. (Smt) Bharati M. Reshmi | Dr. B. F. Ronad             |                            |                                  | Dr. V. G. Akkimardi     |

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Res.      | : The Chairman presented the details of AICTE circular related to offering Universal Human Values (UHV) course and it was resolved to approve Universal Human Values as a mandatory course to B.E. V/VI semesters for the Academic Year 2021-2022.(Annexure - XII)                                                                                                                                                                                                                                                                                                                                                                                            |
| Sub. (16) | : Seeking approval for change in syllabus and assessment pattern of Soft Skill subjects from the Academic Year 2020-2021 even semester onwards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Res.      | : The Chairman presented the syllabus and assessment pattern of Soft Skill subjects and apprised of implementing the two courses from 2020-21 (UHS001N and UHS003N) and one course (UHS002N) from 2021-22. After the discussion it was resolved to approve the syllabus and assessment pattern as follows:<br>i) Fundamentals of Quantitative Aptitude & Soft Skills (UHS001N)<br>ii) Advanced quantitative aptitude & soft skills (UHS002N)<br>iii) Career planning & professional skills (UHS003N)<br>(Annexure - XIII)                                                                                                                                     |
| Sub. (17) | : Seeking approval for recommendations of Equivalence Committee for B.E Program of 200 credits scheme students, admitted to B.E III semester 175 credits scheme for the Academic Year 2020-2021                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Res.      | : The Chairman presented the recommendations of Equivalence Committee. After the discussions it was resolved to approve the recommendations of equivalence committee for B.E Program of 200 credits scheme students, admitted to B.E III semester 175 credits scheme for the Academic Year 2020-2021.<br>(Annexure - XIV)                                                                                                                                                                                                                                                                                                                                     |
| Sub. (18) | : Seeking approval for recommendations of Gracing Policy Committee for UG/PG students from the Academic Year 2021-2022 onwards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Res.      | : The Chairman presented the recommendations of Gracing Policy Committee for UG/PG students from the Academic Year 2021-2022 onwards. After the discussions it was resolved to approve the recommendations as follows:<br>• A maximum of 3 marks (for 100 marks SEE) or 1 mark (for 50 marks SEE) is to be added to one regular theory course of SEE, if a student has passed in all other regular courses and it is applicable only for odd/even Semester End Examinations(SEE)<br>• No gracing for award of class in final CGPA (max. of 0.05 to CGPA)<br>This is applicable to all UG/PG students from academic year 2021-2022 onwards.<br>(Annexure - XV) |
| Sub. (19) | : Seeking approval in reduction of duration for conduction of laboratory sessions for the Academic Year 2020-2021 owing to Covid-19 Pandemic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Res.      | : The Chairman presented the details of number of weeks of laboratory sessions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

| Signatures of Academic Council Members |                             |                            |                                  |                         |  |  |  |  |  |  |  |
|----------------------------------------|-----------------------------|----------------------------|----------------------------------|-------------------------|--|--|--|--|--|--|--|
| Dr. S. S. Injaganeri                   | Dr. P. N. Kulkarni          | Dr. Veena Soragavi         | Dr. R. B. Khadira Naikar         | Dr. K. Chandrasekhar    |  |  |  |  |  |  |  |
| Prof. M. S. Mohan Kumar                | Prof. Madhu N. Belur        | Prof. B. Annappa           | Shri. R. S. Rajkumar             | Dr. T.V. Ravi           |  |  |  |  |  |  |  |
| Prof. G. R. Doddagoudar                | Prof. Sreedhara S. heshadri | Shri. Madhukar ManikD. ube | Dr. P.G. Rakaraddi               | Dr. M. S. Hebbal        |  |  |  |  |  |  |  |
| Dr. S. H. Jangamshetti                 | Dr. V. B. Pagi              | Dr. K. Shridar             | Dr. V. S. Puranki                | Dr. K. Bhat             |  |  |  |  |  |  |  |
| Dr. (Smt) Bharati S. Meti              | Dr. (Smt) S. R. Patil       | Dr. A D. Devanagavi        | Dr. (Smt) Jayashri G. Ghantimath | Dr. P. L. Timmanagoudar |  |  |  |  |  |  |  |
| Dr. S. S. Benchalli                    | Smt. Vidya Hunagund         | Dr. (Smt) Rashmi Hunnur    | Shri. B. S. Haravi               | Dr. S. G. Kambalimath   |  |  |  |  |  |  |  |
| Dr. (Smt) Bharati M. Reshmi            | Dr. B. F. Ronad             |                            |                                  | Dr. V. G. Akkikardi     |  |  |  |  |  |  |  |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             | conducted for the Academic Year 2020-2021. The number of weeks reduced owing to Covid-19 pandemic was brought to the notice of members. After the discussions it was resolved to approve the reduced duration for the laboratory sessions viz. 5 weeks for I year B.E. and 2-3 weeks for B.E. III, V & VII semester students                                                                                                                                                                                                                                                                                                                                                                                  |
| Sub. (20) : | Seeking approval for implementation of new examination (CIE/SEE) pattern and assessment policy for the UG/PG students from the Academic Year 2020-2021 onwards for the students admitted to first year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Res. :      | The Chairman presented the new question paper pattern for the CIE and SEE. After the discussion it was resolved to approve and implement new examination pattern and assessment policy for the UG/PG students admitted to first year from the Academic Year 2020-2021 onwards. (Annexure - XVI)                                                                                                                                                                                                                                                                                                                                                                                                               |
| Sub. (21) : | Seeking approval for implementation of new regulations for AICTE 100 Activity Points for the students admitted during 2018-2019 and 2019-2020 [Ref: VTU/BGM/BOS/A9/2020-21/447, dated. 27.04.2021]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Res. :      | The Chairman presented the details of VTU circular related to regulations for AICTE 100 Activity Points for the B.E students admitted during 2018-2019 and 2019-2020. After the discussion it was resolved to approve and implement modifications in number of AICTE activity points.<br>The details of reduced number of AICTE Activity Points for the B.E students:<br><ul style="list-style-type: none"> <li>Regular students admitted during 2018-2019 &amp; 2019-2020 : 50 points</li> <li>Lateral entry students admitted during 2019-2020 &amp; 2020-2021 : 25 Points</li> <li>Students transferred from other universities to B.E V semester during 2020-2021: 25 points (Annexure - XVII)</li> </ul> |
| Sub. (22) : | Seeking approval for new Programmes: <ul style="list-style-type: none"> <li>B.E in Artificial Intelligence and Machine Learning</li> <li>M.Tech in Food Biotechnology</li> <li>M.Tech in Energy Science and Technology</li> <li>M.Tech in Defence Technology</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Res. :      | The Chairman presented scheme and syllabus of new programmes. After the discussion it was resolved to approve the programmes. The members appreciated and expressed their happiness for starting new programmes in upcoming areas. (Annexure - XVIII)                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Sub. (23) : | Seeking approval for Scholarships, Studentships, Fellowships, Prizes and Medals constituted for meritorious UG/PG students for the Academic Year 2021-2022                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Res. :      | The Chairman presented the list of Scholarships, Studentships, Fellowships, Prizes and Medals constituted for meritorious UG/PG students for the Academic Year 2021-2022. It was discussed and resolved to approve the proposed list for the A.Y. 2021-2022 and                                                                                                                                                                                                                                                                                                                                                                                                                                               |

Signatures of Academic Council Members

|                            |                            |                            |                                  |                         |
|----------------------------|----------------------------|----------------------------|----------------------------------|-------------------------|
| Dr. S. S. Injaganeri       | Dr. P. N. Kulkarni         | Dr. Veena Soragavi         | Dr. R. B. Khadiranaikar          | Dr. K. Chandrasekhar    |
| Prof. M. S. Mohan Kumar    | Prof. Madhu N. Belur       | Prof. B. Annappa           | Shri. R. S. Rajkumar             | Dr. T.V. Ravi           |
| Prof. G. R. Doddagoudar    | Prof. Sreedhara S heshadri | Shri. Madhukar Manik D ube | Dr. P.G. Rakaraddi               | Dr. M. S. Hebbal        |
| Dr. S. H. Jangamshetti     | Dr. V. B. Pagi             | Dr. K. Shridar             | Dr. V. S. Purani                 | Dr. K. Bhat             |
| Dr. (Smt) Bharati S. Meti  | Dr. (Smt) S. R. Patil      | Dr. A D Devanagavi         | Dr. (Smt) Jayashri G. Ghantimath | Dr. P. L. Timmanagoudar |
| Dr. S. S. Benchalli        | Smt. Vidya Hunagund        | Dr. (Smt) Rashmi Hunnur    | Shri. B. S. Haravi               | Dr. S. G. Kambalimath   |
| Dr. (Smt) Bharati M Reshmi | Dr. B. F. Ronad            |                            |                                  | Dr. V. G. Akkimaradi    |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             | post-facto approval for the previous years. (Annexure - XIX)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Sub. (24) : | Seeking approval for Non-disclosure of SEE answer scripts to students in physical form for the Academic Year 2020-2021 owing to Covid-19 Pandemic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Res. :      | The Chairman presented difficulties faced by both faculty and students for disclosure/viewing of SEE answer scripts to students during the Academic Year 2020-2021 owing to Covid-19 Pandemic to all members present. After clarification the Non-disclosure of SEE answer scripts to students in physical form for the Academic Year 2020-2021 was approved. However, the committee members recommended to provide the facility of photocopy on request basis and to extend the same till the situation comes to normalcy.                                                                                                                                                                                                                           |
| Sub. (25) : | Any other matter with the permission of the Chair                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Res. :      | <ul style="list-style-type: none"> <li>• The Chairman presented the new placement policy to be adopted at college from the academic year 2021-2022 onwards. After the discussions it was resolved to approve the new policy from the academic year 2021-2022 onwards</li> <li>• The Chairman presented the proposal for implementing NEP 2020 from the academic year 2022-2023 at BEC. After the discussions it was resolved that, BEC can initiate the preparations for implementation of NEP 2020 and the same may be implemented upon receiving the guidelines from competent authorities.</li> <li>• Further, members of the council suggested the institution/B.V.V Sangha to apply for converting/recognition as a state university.</li> </ul> |

The 17<sup>th</sup> Academic Council meeting was concluded with vote of thanks.

  
Member Secretary  
[ Dr. V. G. Akkamaraj ]

  
Principal

#### Board of Studies (BOS):

Every programme comprises of a BOS committee. The committee consists as its members the senior faculty, Alumni, VTU Nominee, Industry persons and subject experts. The HOD is the Chairman of the committee. The BOS meetings are conducted before the commencement of every academic year.

#### Functions

The Board of Studies of a Department shall

1. Prepare syllabi for various courses, keeping in view the objectives of the college, interest of the stakeholders and the state/ National requirements, for the consideration and approval of the Academic Council
2. Suggest methodologies for innovative teaching, learning and evaluation techniques
3. Suggest panel of names of experts to the Controller of examinations, for appointment as examiners in consultation of senior faculty members (Board of Examiners) of the department
4. Coordinate research, teaching, extension and other academic activities in the departments
5. Any other functions that may be assigned by the academic council

The structure of Board of Studies is as shown below table 10.4.

Table 10.4. The structure of Board of Studies

| Sl. No | Category                                                                                  | Number | Nomination of the committee |
|--------|-------------------------------------------------------------------------------------------|--------|-----------------------------|
| 01     | Head of the Department                                                                    | 1      | Chairperson                 |
| 02     | Faculty members at different levels across different specializations                      | 6      | Member                      |
| 03     | Subject Experts from outside the College nominated by Academic Council                    | 2      | Member                      |
| 04     | Experts from outside college, nominated by Vice Chancellor, Affiliating University        | 1      | Member                      |
| 05     | Representative from Industry/ Corporate sector/ allied area nominated by Academic Council | 1      | Member                      |
| 06     | Postgraduate Meritorious alumnus nominated by Principal                                   | 1      | Member                      |
| 07     | Co-opted members                                                                          | 1      | Member                      |

**Board of Examiners (BOE):**

Every programme comprises of a Board of Examiners (BOE) which is a subset of BoS. The head of the department is the chairman of the committee. It consists of senior faculty in the department as its members. The primary function of the BOE is to assist the Examination Process in smooth conduction of Semester End Examinations (SEE) and laboratory examinations. The committee approves the internal and external examiners for question paper setting and evaluation of answer scripts for each course. Also, it approves the list of internal and external examiners for laboratory examinations. The BOE meetings are held at the beginning of every semester.

The Structure of BOE for each department is shown below table 10.5.

**Table 10.5. The Structure of BOE for each department**

| Category                                  | Nomination of the committee |
|-------------------------------------------|-----------------------------|
| Head of the Department                    | Chairman                    |
| Senior faculty member from the department | BOE Coordinator             |
| Senior faculty members of the department  | Members                     |

**Finance Committee:**

The functions of finance committee are

1. To prepare budget for the financial year based on probable income and expenditure.
2. Audit the accounts at the end of each financial year
3. To act as an advisory board to Governing Body/Governing Council

The Finance Committee will meet at least twice in a year. The structure of Finance Committee is as shown below table 10.6.

**Table 10.6. The structure of Finance Committee**

| Sl. No. | Category                         | Nomination of the committee |
|---------|----------------------------------|-----------------------------|
| 1       | Principal                        | Chairperson                 |
| 2       | Member of Governing Body         | Member                      |
| 3       | Senior Faculty                   | Member                      |
| 4       | Person with Financial Management | Member                      |
| 5       | Finance Officer                  | Member-Secretary            |

**Board of Appointments:**

The Board of Appointments looks after recruitment process. During the process the norms stipulated by AICTE and KCSR are strictly adhered to. The structure of the board of Appointments is shown below table 10.7.

**Table 10.7. The structure of the board of Appointments**

| Sl.No. | Category                                            | Nomination of the committee |
|--------|-----------------------------------------------------|-----------------------------|
| 1      | Chairman of the Governing Body/Governing Council    | Chairperson                 |
| 2      | University nominee                                  | Member                      |
| 3      | Nominee of SC/ST/OBC - Nominated by Vice-Chancellor | Member                      |
| 4      | AICTE Nominee                                       | Member                      |
| 5      | Two subject Experts                                 | Member                      |
| 6      | Concerned Head of the department                    | Member                      |
| 7      | Principal                                           | Member- Secretary           |

**Library Committee:**

The College library is having library committee. The functions of the library committee are:

1. To look after the overall development of the library.
2. To approve the budget placed by the librarian and recommend the same to the Governing Body
3. To guide the Librarian in formulating general library policies and regulations which govern the functions of the Library
4. To work towards modernization and improvement of Library.
5. To formulate policies and procedures for efficient use of Library resources.
6. To adopt measures to enhance readership.

The structure of the Library Committee is shown below 10.8.

**Table 10.8. The structure of the library committee**

| Sl. No. | Category                     | Nomination of the committee |
|---------|------------------------------|-----------------------------|
| 1       | Principal                    | Chairman                    |
| 2       | All Heads of the departments | Member                      |
| 3       | Librarian                    | Ex-officio secretary        |

#### **Rules, Policies and procedures**

1. The recruitment, promotion policies and other service related matters are as per KCSR rules of Karnataka State Government and B. V. V. Sangha.
2. The rules pertaining to dos and don'ts and examination system is published in BEC rules and regulations hand book provided to students at the time of admission to the college.

All the employees are made aware about the rules, regulations and procedures upon joining the college and subsequently the amendments are communicated during the faculty/staff meeting

#### **10.1.4 Decentralization in working and grievance redressal mechanism (5)**

Institute Marks : 5.00

List the names of the faculty members who have been delegated powers for taking administrative decisions. Mention details in respect of decentralization in working. Specify the mechanism and composition of grievance redressal cell including Anti Ragging Committee & Sexual Harassment Committee.

Majority of the decisions within the department are made by the respective heads of the departments. The detail of heads of the departments are shown in below table 10.9.

**Table 10.9. Heads of the departments**

| Sl. No. | Name                    | Head of the Department                    |
|---------|-------------------------|-------------------------------------------|
| 1       | Dr. P. G. Rakaraddi     | Civil Engineering                         |
| 2       | Dr. M. S. Hebbal        | Mechanical Engineering                    |
| 3       | Dr. S. H. Jangamashetti | Electrical and electronics Engineering    |
| 4       | Dr. V. B. Pagi          | Computer Science & Engineering            |
| 5       | Dr. K. Shridhar         | Electronics and Communication Engineering |
| 6       | Dr. V. S. Puranik       | Industrial Production                     |
| 7       | Dr. V. G. Akkimaradi    | Automobile Engineering                    |
| 8       | Dr. K. Bhat             | Instrumentation Technology                |
| 9       | Dr. Shobha R. Patil     | Information Science & Engineering         |
| 10      | Dr. Bharati S. Meti     | Biotechnology                             |
| 11      | Dr. Rashmi R. Hunnur    | MBA                                       |

|    |                         |                                              |
|----|-------------------------|----------------------------------------------|
| 12 | Dr. A. D. Devangavi     | Artificial Intelligence and Machine Learning |
| 13 | Dr. J. G. Gantimath     | Physics                                      |
| 14 | Dr. P. L. Timmanagoudar | Chemistry                                    |
| 15 | Dr. S. S. Benchalli     | Mathematics                                  |
| 16 | Dr. B. G. Hokrani       | HSS                                          |

A core team comprising of senior faculty members lead the major processes in the institute to see that all the processes are intact. The list of faculty members in-charge of various committees / responsibilities is shown in the table below 10.10.

**Table 10.10. The list of faculty members in-charge of various committees / responsibilities**

| Sl. No. | Name of faculty          | Responsibilities                                       |
|---------|--------------------------|--------------------------------------------------------|
| 01      | Dr. P. N. Kulkarni       | Dean, Academics                                        |
| 02      | Dr. V. S. Soraganvi      | Dean, R & D                                            |
| 03      | Dr. R. B. Khadirmaikar   | Dean, Student Welfare                                  |
| 05      | Dr. Chandrashekar        | Controller of Examinations                             |
| 06      | Dr. S. G. Kambalimath    | Placement officer                                      |
| 07      | Dr. B. S. Haravi         | Development officer                                    |
| 08      | Dr. R. L. Naik           | Gymkhana Chairman                                      |
| 09      | Dr. Mahabaleshwar S. K.  | Campus Networking                                      |
| 10      | Dr. Shridhar Kuntoji     | Public Relation Officer                                |
| 11      | Dr. B. S. Haravi         | Consultancy Services                                   |
| 12      | Prof. S. S. Bopardekar   | Central Store                                          |
| 13      | Dr. Sarojini B. K.       | Coordinator, Internal Complaints Committee (ICC)       |
| 14      | Prof. B. R. Endigeri     | SC/ST Cell                                             |
| 15      | Dr. P. L. Timmanagoudar  | Member Secretary, Antiragging Squad & Review Committee |
| 16      | Dr. V. S. Puranik        | Entrepreneurship Development Cell                      |
| 17      | Dr. S. G. Karakun        | Librarian                                              |
| 18      | Dr. S. R. Patil          | Coordinator, Student Induction Program (SIP)           |
| 19      | Dr. P. L. Timmanagoudar  | Chief Warden (Boys Hostel)                             |
| 20      | Dr. C. M. Veerendrakumar | Warden (Boys Hostel)                                   |
| 21      | Dr. G. B. Megeri         | Warden (Boys Hostel)                                   |
| 22      | Dr. A. V. Sutagundar     | Warden (Boys Hostel)                                   |
| 23      | Prof. B. R. Endigeri     | Warden (Boys Hostel)                                   |
| 24      | Prof. Vivekanand B. S.   | Warden (Boys Hostel)                                   |
| 25      | Dr. V. S. Soraganvi      | Chief Warden (Girls Hostel)                            |
| 26      | Dr. S. R. Patil          | Warden (Girls Hostel)                                  |
| 27      | Prof. S. S. Tambakad     | Warden (Girls Hostel)                                  |
| 28      | Prof. Sudha S. K.        | Warden (Girls Hostel)                                  |

**The mechanism of grievance redressal system:**

The institute has three grievance redressal mechanisms in place namely

1. Student grievance redressal committee
2. Faculty/Staff redressal committee
3. Internal Complaints Committee

#### Student Grievance redressal system:

In each department HoD and Faculty / staff are organized at the beginning of every semester to discuss about anti ragging and 2 faculty members (1 male faculty and 1 female faculty) are selected for the institution level Anti-Ragging committee. The head of the department addresses the students of all semesters including fresh admitted students to create awareness about anti ragging.

The issues of students related to ragging on campus and in hostels are addressed through anti-ragging committee. In addition to this wardens also take appropriate measures to curb ragging in hostels.

#### Anti-Ragging committee:

The primary function of the committee is to look into the nuisance of ragging; Studying various aspects of ragging, means and methods to prevent it, possible action that can be taken against those who indulge in it, and action against offenders in the event of ragging. The structure of Anti-Ragging committee and the measures taken to prevent/curb ragging are as shown below:

Anti-Ragging Review Committee to Curb Ragging 2021-22 is as shown in table 10.11.

**Table 10.11. Anti-Ragging Review Committee**

| Sl. No | Name of the Member          | Designation                 | Mobile No         | Position        |
|--------|-----------------------------|-----------------------------|-------------------|-----------------|
| 1      | <b>Dr. S. S. Injaganeri</b> | <b>Principal</b>            | <b>9481228825</b> | <b>Chairman</b> |
| 2      | Dr. K. Chandrashekar        | Controller of Examination   | 9448336581        | Member          |
| 3      | Dr. P. N. Kulkarni          | Dean, Academic              | 9449767888        | Member          |
| 4      | Dr. R. B. Khadarinaikar     | Dean, Student Welfare       | 9448986877        | Member          |
| 5      | Shri. S. M. Avaji           | C.P.I., Navanagar, Bagalkot | 9480803930        | Member          |
| 6      | Dr. S. H. Jangamashetti     | HOD, E & E Engineering      | 9845095956        | Member          |
| 7      | Dr. P. G. Rakaraddi         | HOD, Civil Engineering      | 9448085007        | Member          |
| 8      | Dr. M. S. Hebhal            | HOD, Mechanical Engineering | 9481137429        | Member          |
| 9      | Dr. K. Shridhar             | HOD, E & C Engineering      | 7259704913        | Member          |
| 10     | Dr. V. S. Puranik           | HOD, IP & Engineering       | 9880224730        | Member          |
| 11     | Dr. V. G. Akkimaradi        | HOD, Auto. Engineering      | 9448311580        | Member          |
| 12     | Dr. V. B. Pagi              | HOD, C.Sc & Engineering     | 9342647100        | Member          |
| 13     | Dr. (Mrs.) Shobha R. Patil  | HOD, I. Sc. & Engineering   | 9449534202        | Member          |
| 14     | Dr. K. Bhat                 | HOD, E & I Engineering      | 9880192002        | Member          |
| 15     | Dr.(Mrs.) Bharati S. Meti   | HOD, Bio Technology         | 9448972628        | Member          |
| 16     | Dr. Rashmi R.Hunnur         | HOD, MBA                    | 9449159015        | Member          |
| 17     | Prof.(Mrs.) V.B. Hunagund   | Associate Professor, CSE    | 9741685506        | Member          |
| 18     | Dr(Mrs.) J. G. Ghanmath     | HOD, Physics                | 9448831331        | Member          |
| 19     | Dr. S. S. Benchalli         | HOD, Mathematics            | 8762644634        | Member          |
| 20     | Dr. G. B. Megeri            | Warden, Boys Hostel(V)      | 8431043774        | Member          |
| 21     | Prof. B.S. Vivekanad        | Warden, Boys Hostel(N)      | 9480234598        | Member          |
| 22     | Prof. (Mrs) Sunita Tambakad | Warden, Girls Hostel        | 9900489841        | Member          |



|    |                            |                             |            |             |
|----|----------------------------|-----------------------------|------------|-------------|
| 23 | Dr. R. L. Naik             | Chairman, Gymkhana          | 9880529043 | Member      |
| 24 | Dr. S. G. Karkun           | Librarian                   | 9448514872 | Member      |
| 25 | Miss. Sapna Gururaj Rathod | Student, Civil Engineering  | 7618744868 | Member      |
| 26 | Mr. Adish Khemalapure      | Student, C. Sc. Engineering | 6362010956 | Member      |
| 27 | Dr. P. L. Timmanagoudar    | HOD, Chemistry              | 9448693600 | Member/Sec. |

## Annexure – 1

B.V.V. Sangha's

BASAVESHWAR ENGINEERING COLLEGE (AUTONOMOUS), BAGALKOT

MEASURES TO CURB THE MENACE OF RAGGING 2021 – 22

ANTI – RAGGING SQUAD

Table 10.12. Anti - Ragging Squad

| Sl.No. | Team | Name of Squad Members          | Dept.                        | Mobile No.        | Position                  |
|--------|------|--------------------------------|------------------------------|-------------------|---------------------------|
| 1      | A    | <b>Dr. R. B. Khadairnaikar</b> | <b>Dean, Student Welfare</b> | <b>9448986877</b> | <b>Chairman</b>           |
| 2      |      | <b>Prof. B. R. Hiremath</b>    | <b>CV</b>                    | <b>9448939700</b> | <b>Member/Coordinator</b> |
| 3      |      | Prof. S. R. Rathod             | EE                           | 7259244313        | Member                    |
| 4      |      | Prof. S. G. Nayak              | EE                           | 9738681084        | Member                    |
| 5      |      | Prof. Seema Shringeri          | CV                           | 9742935857        | Member                    |
| 6      |      | Mr. Raghav Bhattad             | CV                           | 7411431972        | Member                    |
| 7      |      | Miss. Sapna Gururaj Rathod     | CV                           | 7618744868        | Member                    |
| 8      |      | Mr. Sachin Ganjala             | EE                           | 6363014540        | Member                    |
| 9      |      | Miss. Neelaganga Goudar        | EE                           | 9108607989        | Member                    |
| 10     | B    | <b>Prof. R. Nagaraj</b>        | <b>AU</b>                    | <b>9448972605</b> | <b>Member/Coordinator</b> |
| 11     |      | Dr. S. G. Sarganachari         | ME                           | 9448986768        | Member                    |
| 12     |      | Dr. Govindraj B. Chittapur     | <b>CSE</b>                   | 9739265167        | Member                    |
| 13     |      | Prof. C. M. Veerendrakumar     | AU                           | 9448336646        | Member                    |
| 14     |      | Mr. Amogh Deshpande            | ME                           | 8123280249        | Member                    |
| 15     |      | Miss. Aksha Goudar             | ME                           | 9008683889        | Member                    |
| 16     |      | Mr. Aman Agarawl               | AU                           | 9148863115        | Member                    |
| 17     |      | Miss. Vishakha Pujari          | AU                           | 9483732907        | Member                    |
| 18     | C    | <b>Prof. M.G. Kambalimath</b>  | <b>E&amp;I</b>               | <b>9880168267</b> | <b>Member/Coordinator</b> |
| 19     |      | Prof. P. B. Bhagavati          | E&I                          | 9986591299        | Member                    |
| 20     |      | Prof. S.C.Hiremath             | E&C                          | 9901446534        | Member                    |
| 21     |      | Prof. Sharanappa               | E&C                          | 9900855255        | Member                    |

|    |   |                                |                  |                   |                           |
|----|---|--------------------------------|------------------|-------------------|---------------------------|
| 22 |   | Mr. Anvesh Hiremath            | E&C              | 8296101571        | Member                    |
| 23 |   | Miss. Geetha Maski             | E&C              | 9148247764        | Member                    |
| 24 |   | Mr. Pavan Y. Vyasamudri        | E &I             | 7019152880        | Member                    |
| 25 |   | Miss. Akshata Biradar          | E &I             | 6363467564        | Member                    |
| 26 | D | <b>Dr. D. G. Mallapur</b>      | <b>IPE</b>       | <b>9448112990</b> | <b>Member/Coordinator</b> |
| 27 |   | Prof. Girish Shettar           | ISE              | 9620863183        | Member                    |
| 28 |   | Prof. G.B. Megeri              | B T              | 9448892288        | Member                    |
| 29 |   | Dr. R. S. Wadawadagi           | AIML             | 8095070548        | Member                    |
| 30 |   | Mr. Adish Khemalapure          | CSE              | 63620 10956       | Member                    |
| 31 |   | Mr. Shrinivas Inamati          | IPE              | 8746831869        | Member                    |
| 32 |   | Mr. Shankargouda S Patil       | BT               | 8660375506        | Member                    |
| 33 |   | Mr. Bhaskar Patil              | ISE              | 8446201993        | Member                    |
| 34 | E | <b>Prof. Swati Wadawadagi</b>  | <b>ME</b>        | <b>8970589969</b> | <b>Member/Coordinator</b> |
| 35 |   | Prof. Deepa Kalappanavar       | ISE              | 9481982363        | Member                    |
| 36 |   | Prof. Shilpa P. Madhavanvar    | CSE              | 80955 45010       | Member                    |
| 37 |   | Prof. Shilpa K. Jigajinni      | BT               | 8722485018        | Member                    |
| 38 |   | Miss. Krutika Jigajinni        | ISE              | 9380715775        | Member                    |
| 39 |   | Miss. G. Madhulekha            | CSE              | 7259799094        | Member                    |
| 40 |   | Miss. Sakshi Sonagaj           | AIML             | 8792748644        | Member                    |
| 41 |   | Miss. Pavitra Katageri         | BT               | 9686640724        | Member                    |
| 42 |   | <b>Dr. P. L. Timmanagoudar</b> | <b>Chemistry</b> | <b>9448693600</b> | <b>Member/Secretary</b>   |

#### VISITING PLACES AND TIMINGS OF ANTI-RAGGING SQUAD TEAM

|                                                                       |                                   |    |                                 |
|-----------------------------------------------------------------------|-----------------------------------|----|---------------------------------|
| 1.                                                                    | Quadrangle (Ground & First Floor) | 2. | Canteen Premises & Library      |
| •                                                                     | First Visit : 09.55 – 10.15 am    | •  | First Visit : 09.55 – 10.15 am  |
| •                                                                     | Second Visit : 12.10 – 12.45 pm   | •  | Second Visit : 12.10 – 12.45 pm |
| •                                                                     | Third Visit : 02.55 – 03.20 pm    | •  | Third Visit : 02.55 – 03.20 pm  |
| •                                                                     | Fourth Visit : 05.10 – 05.30 pm   | •  | Fourth Visit : 05.10 – 05.30 pm |
| 3.                                                                    | Boys Hostel                       | 4. | Girls Hostel                    |
| •                                                                     | First Visit : 07.00 – 08.00 am    | •  | First Visit : 07.00 – 08.00 am  |
| •                                                                     | Second Visit : 01.00 – 02.00 pm   | •  | Second Visit : 01.00 – 02.00 pm |
| •                                                                     | Third Visit : 05.00 06.00 pm      | •  | Third Visit : 05.00 06.00 pm    |
| Department Visit: Visits may be planned randomly and during lab hours |                                   |    |                                 |

#### ACTION PLAN

Members of Ant-ragging squad is divided into five teams as A, B, C, D, & E, to visit the above mentioned venues at given timings as per following schedule, which is shown in table 10.13.

**Table 10.13. Schedule**

| Sr. No. | Venue / Day                       | MON | TUE | WED | THU | FRI | SAT |
|---------|-----------------------------------|-----|-----|-----|-----|-----|-----|
| 1       | Quadrangle (Ground & First Floor) | A   | B   | C   | D   | A   | B   |
| 2       | Canteen and Library               | B   | C   | D   | A   | B   | C   |
| 3       | Boys Hostel (N-Block)             | C   | D   | A   | B   | C   | D   |
| 4       | Department Visit                  | D   | A   | B   | C   | D   | A   |
| 5       | Girls Hostel                      | E   | E   | E   | E   | E   | E   |

**Instructions to Committee Members:**

1. The above mentioned teams are informed to visit the said venues on that particular day at the given timings.
2. During the department visit, please sign in the ledger kept in the respective department with observations.
3. During the visit at quadrangle please sign in the ledger kept at Principal's Chamber.
4. During the visit at library please sign in the ledger kept at library office.

**Faculty/Staff Grievance redressal system:**

The institute has 2 associations:

1. Teaching Staff association: All the teaching staff of the institute are the members of the association. One senior teaching staff is elected as Faculty secretary to coordinate the activities.
2. Non-teaching staff association: All the non-teaching staff of the institute are the members of the association. One senior non-teaching staff is elected as staff secretary to coordinate the activities.

The grievances of the members are brought to the notice of the Faculty/Staff secretary, who in consultation with Principal of the institute resolves the issues.

**Internal Complaints Committee**

To address women's complaints associated with sexual harassment a committee is in place. Any women aggrieved in this matter may fearlessly approach the committee for a fair and concerned hearing and redressal. The objectives of the committee are:

1. To ensure provision of a conducive work and educational environment free from sexual harassment.
2. To take appropriate measures (active and preventive in nature) to prevent the harassment occurring.

The structure of Internal Complaints Committee is as shown below table 10.14.

**Table 10.15. Internal Complaints Committee**

| Sl. No | Name                    | Designation |
|--------|-------------------------|-------------|
| 1      | Dr. Sarojini B. K       | Chairman    |
| 2      | Sri. Mahantesh Hiremath | Member      |
| 3      | Dr. K. Ramprasad        | Member      |
| 4      | Dr. S. U. Durgadasimi   | Member      |
| 5      | Smt. Neeta Hiremath     | Member      |
| 6      | Miss Vaibhavi Gayakwad  | Member      |

Delegation of Financial Powers is as shown below table 10.16.

**Table 10.16. Financial details**

| Functionary            | Financial Powers (up to Rs) | Limit for Consumables (Rs) | Limit for Non-Consumables (Rs) | Limit for hiring Services(Rs) |
|------------------------|-----------------------------|----------------------------|--------------------------------|-------------------------------|
| Head of the Institute  | 20,00,000                   | 2,50,000                   | 15,00,000                      | 2,50,000                      |
| Head of the Department | 1,00,000                    | 10,000                     | 90,000                         | 10,000                        |
| Dean                   | 1,00,000                    | 10,000                     | 80,000                         | 10,000                        |
| Other-Professor        | 50,000                      | 5,000                      | 40,000                         | 5,000                         |
| Associate Professor    | 25,000                      | 5,000                      | 15,000                         | 5,000                         |
| Assistant Professor    | 20,000                      | 3,000                      | 15,000                         | 2,000                         |

#### 10.1.6 Transparency and availability of correct/unambiguous information in public domain (5)

Institute Marks : 5.00

|                                                                                  |                                                                                                                                         |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Availability and dissemination of information through the Internet               | <b>Yes</b><br>All the information is available on the college website, www.becbgk.edu<br>(including the general & mandatory disclosure) |
| Information provisioning in accordance with the Right to Information Act, 2005). | <b>Yes</b><br>Details are made available on the college website and also displayed on the college notice board                          |

#### 10.2 Budget Allocation, Utilization, and Public Accounting at Institute level (15)

Total Marks 15.00

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3

CFY : (Current Financial Year),

CFYm1 : (Current Financial Year minus 1),

CFYm2 : (Current Financial Year minus 2) and

CFYm3 : (Current Financial Year minus 3)

**Table 1 - CFY 2021-2022**

|                        |         |           |                        |                                        |               |                                    |                               |
|------------------------|---------|-----------|------------------------|----------------------------------------|---------------|------------------------------------|-------------------------------|
| Total Income 331690869 |         |           |                        | Actual expenditure(till...): 540706111 |               |                                    | Total No. Of Students<br>3140 |
| Fee                    | Govt.   | Grants    | Other sources(specify) | Recurring including salaries           | Non Recurring | Special Projects/Anyother, specify | Expenditure per student       |
| 186763453              | 1862752 | 125333049 | 17731615               | 325866690                              | 214839421     | 0                                  | 172199.40                     |

**Table 2 - CFYm1 2020-2021**

|                        |         |           |                        |                                        |               |                                    |                               |
|------------------------|---------|-----------|------------------------|----------------------------------------|---------------|------------------------------------|-------------------------------|
| Total Income 317328759 |         |           |                        | Actual expenditure(till...): 439827331 |               |                                    | Total No. Of Students<br>3047 |
| Fee                    | Govt.   | Grants    | Other sources(specify) | Recurring including salaries           | Non Recurring | Special Projects/Anyother, specify | Expenditure per student       |
| 158451721              | 2569373 | 125916242 | 30391423               | 333161463                              | 106665868     | 0                                  | 144347.66                     |

**Table 3 - CFYm2 2019-2020**

|                        |         |           |                        |                                        |               |                                    |                               |
|------------------------|---------|-----------|------------------------|----------------------------------------|---------------|------------------------------------|-------------------------------|
| Total Income 320179889 |         |           |                        | Actual expenditure(till...): 367194831 |               |                                    | Total No. Of Students<br>3045 |
| Fee                    | Govt.   | Grants    | Other sources(specify) | Recurring including salaries           | Non Recurring | Special Projects/Anyother, specify | Expenditure per student       |
| 178354355              | 1381079 | 126409585 | 14034870               | 333588085                              | 33606746      | 0                                  | 120589.44                     |

**Table 4 - CFYm3 2018-2019**

|                        |         |           |                        |                                        |               |                                    |                               |
|------------------------|---------|-----------|------------------------|----------------------------------------|---------------|------------------------------------|-------------------------------|
| Total Income 331690869 |         |           |                        | Actual expenditure(till...): 540706111 |               |                                    | Total No. Of Students<br>3140 |
| Fee                    | Govt.   | Grants    | Other sources(specify) | Recurring including salaries           | Non Recurring | Special Projects/Anyother, specify | Expenditure per student       |
| 186763453              | 1862752 | 125333049 | 17731615               | 325866690                              | 214839421     | 0                                  | 172199.40                     |

| Items                           | Budgeted in 2021-2022 | Actual Expenses in 2021-2022 till | Budgeted in 2020-2021 | Actual Expenses in 2020-2021 till | Budgeted in 2019-2020 | Actual Expenses in 2019-2020 till | Budgeted in 2018-2019 | Actual Expenses in 2018-2019 till |
|---------------------------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|
| Laboratory equipment            | 1000000               | 652493                            | 4200000               | 4068935                           | 8000000               | 6814221                           | 1500000               | 1076305                           |
| Laboratory consumables          | 1000000               | 445833                            | 1800000               | 1777548                           | 2000000               | 1734643                           | 3000000               | 2562811                           |
| Teaching and non-teaching staff | 3300000               | 2296006                           | 3300000               | 3129425                           | 3200000               | 3060361                           | 3100000               | 2973928                           |
| Maintenance and spares          | 500000                | 0                                 | 100000                | 76524                             | 500000                | 318301                            | 500000                | 243059                            |
| R&D                             | 1000000               | 0                                 | 1500000               | 300000                            | 6000000               | 5870000                           | 1000000               | 0                                 |

|                         |                  |                  |                  |                  |                  |                  |                  |                  |
|-------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Training and Travel     | 100000           | 59893            | 100000           | 78676            | 1000000          | 593804           | 200000           | 171199           |
| Miscellaneous Expenses* | 1500000          | 1076220          | 1500000          | 123095           | 500000           | 410656           | 1500000          | 218096           |
| Infrastructure Built-Up | 1200000          | 1111905          | 1100000          | 1025969          | 4000000          | 2679252          | 4000000          | 3114466          |
| Library                 | 1500000          | 1373036          | 3300000          | 3226762          | 1000000          | 791267           | 1000000          | 0                |
| Others, specify         | 0                | 0                | 0                | 0                | 0                | 0                | 0                | 0                |
| <b>Total</b>            | <b>456600000</b> | <b>244327144</b> | <b>452500000</b> | <b>425190993</b> | <b>379000000</b> | <b>349361554</b> | <b>372200000</b> | <b>342495716</b> |

#### 10.2.1 Adequacy of budget allocation (5)

Institute Marks : 5.00

Before the commencement of every academic year a meeting of all the Heads of departments is convened and budgetary requirement is taken for the categories of expenditure. The categories considered are procurement of new equipment, maintenance/servicing of existing equipment, consumables required, building space and also books required for the library for each department based in the curricular reforms suggested in the respective Board of Studies.

For buildings (new construction as well as maintenance of existing building) detailed plans and estimates are prepared and approval is taken for the same in the Governing Council meetings. A detailed report of all the development works undertaken and their current status is presented in the Governing Council meeting.

The budgetary requirements are met through the admission fees collected from the students and the revenue generated from the consultancy services. The budget allocated at the beginning of the financial year is adequate for managing the expenditure during that year. In case of any additional funds required, the management provides the requisite support.

#### 10.2.2 Utilization of allocated funds (5)

Institute Marks : 5.00

During each financial year out of the total budget allocated nearly 85% to 95% of the budget is utilized under the respective category of expenditure proposed. For the financial year 2020-21 the outlay of the budget was Rs. 45,25,00,000 and the total expenditure being Rs. 42,51,90,993 thus, 93.96% of the total budget has been utilized. The major component of expenditure is towards the salary of faculty and staff, with nearly 69.15% of the total budget being allocated. The budget utilized under other categories is 30.85%. The management contributes 15% and 100% of the salary component for faculty and staff of Aided and Unaided departments respectively.

In total, the budget allocated during each financial year is effectively utilized and the institute is self-sustaining to a large extent. In case of any shortfall in finances required for developmental activities the management provides the requisite support.

#### 10.2.3 Availability of the audited statements on the institute's website (5)

Institute Marks : 5.00

Yes

#### 10.3 Program Specific Budget Allocation, Utilization (30)

Total Marks 30.00

Total Income at Institute level: For CFY,CFYm1,CFYm2 & CFYm3

CFY: (Current Financial Year),

CFYm1 : (Current Financial Year minus 1),

CFYm2 : (Current Financial Year minus 2) and

CFYm3 : (Current Financial Year minus 3)

**Table 1 :: CFY 2021-2022**

|                      |           |                                      |           |                           |
|----------------------|-----------|--------------------------------------|-----------|---------------------------|
| Total Budget 3900000 |           | Actual expenditure (till...): 263344 |           | Total No. Of Students 303 |
| Non Recurring        | Recurring | Non Recurring                        | Recurring | Expenditure per student   |
| 1700000              | 2200000   | 191036                               | 72308     | 869.12                    |

**Table 2 :: CFYm1 2020-2021**

|                      |           |                                      |           |                           |
|----------------------|-----------|--------------------------------------|-----------|---------------------------|
| Total Budget 3900000 |           | Actual expenditure (till...): 162854 |           | Total No. Of Students 297 |
| Non Recurring        | Recurring | Non Recurring                        | Recurring | Expenditure per student   |
| 1700000              | 2200000   | 72000                                | 90854     | 548.33                    |

**Table 3 :: CFYm2 2019-2020**

|                      |           |                                      |           |                           |
|----------------------|-----------|--------------------------------------|-----------|---------------------------|
| Total Budget 2160000 |           | Actual expenditure (till...): 504515 |           | Total No. Of Students 297 |
| Non Recurring        | Recurring | Non Recurring                        | Recurring | Expenditure per student   |
| 1700000              | 460000    | 167560                               | 336955    | 1698.70                   |

**Table 4 :: CFYm3 2018-2019**

|                      |           |                                      |           |                           |
|----------------------|-----------|--------------------------------------|-----------|---------------------------|
| Total Budget 1870000 |           | Actual expenditure (till...): 148424 |           | Total No. Of Students 290 |
| Non Recurring        | Recurring | Non Recurring                        | Recurring | Expenditure per student   |
| 1700000              | 170000    | 81240                                | 67184     | 511.81                    |

| Items                   | Budgeted in 2021-2022 | Actual Expenses in 2021-2022 till | Budgeted in 2020-2021 | Actual Expenses in 2020-2021 till | Budgeted in 2019-2020 | Actual Expenses in 2019-2020 till | Budgeted in 2018-2019 | Actual Expenses in 2018-2019 till |
|-------------------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|
| Laboratory equipment    | 1000000               | 191036                            | 1000000               | 72000                             | 1000000               | 167560                            | 1000000               | 81240                             |
| Software                | 200000                | 0                                 | 200000                | 0                                 | 200000                | 0                                 | 200000                | 0                                 |
| Laboratory consumable   | 100000                | 62308                             | 100000                | 0                                 | 100000                | 0                                 | 100000                | 10422                             |
| Maintenance and spares  | 10000                 | 5000                              | 10000                 | 5000                              | 10000                 | 5000                              | 10000                 | 5000                              |
| R & D                   | 500000                | 0                                 | 500000                | 0                                 | 500000                | 0                                 | 500000                | 0                                 |
| Training and Travel     | 100000                | 0                                 | 100000                | 78754                             | 350000                | 327955                            | 50000                 | 46762                             |
| Miscellaneous Expenses* | 10000                 | 5000                              | 10000                 | 7100                              | 10000                 | 4000                              | 10000                 | 5000                              |
| <b>Total</b>            | <b>1920000</b>        | <b>263344</b>                     | <b>1920000</b>        | <b>162854</b>                     | <b>2170000</b>        | <b>504515</b>                     | <b>1870000</b>        | <b>148424</b>                     |

**10.3.1 Adequacy of budget allocation (10)**

Institute Marks : 10.00

Before the commencement of every academic year a meeting of Head of the department, faculty and staff members is convened and budgetary requirement is taken for the categories of expenditure.

The categories considered are procurement of new equipments, maintenance/servicing of existing equipments, consumables required and also books required for the library for each department based in the curricular reforms suggested in the respective Board of Studies.

The budget allocated at the beginning of the financial year is adequate for managing the expenditure during that year. In case of any additional funds required, the management provides the requisite support.

**10.3.2 Utilization of allocated funds (20)**

Institute Marks : 20.00

During any financial year out of the total budget allocated nearly 70% to 90% of the budget is utilized under the respective category of expenditure proposed.

During the financial year the allocated budget was Rs. 8,57,000.00 and the expenditure being Rs. 7,46,635.00 indicating the utilization of 87.12%.

The expenditure towards the procurement of laboratory equipments/consumables is 75.38% of the allocated budget.

The budget utilized under training and travel is around 5.29%. For some of the equipments procured and training and travel expenditures funds released under TEQIP – II and TEQIP-III were utilized. Thus during each year the budget is properly allocated and efficiently utilized.

**10.4 Library and Internet (20)**

Total Marks 20.00

**10.4.1 Quality of learning resources (hard/soft) (10)**

Institute Marks : 10.00

**Relevance of available learning resources including e-resource**

Number of titles : 43,955

Number of volumes : 1, 39,000

Availability of digital library contents is as shown in table 10.17.

Table 10.17. **Learning resources**

| Year    | No. of Technical Magazines/Periodicals | No. of Technical journals subscribed |           | Scholarly journal titles (originals and reprints) |
|---------|----------------------------------------|--------------------------------------|-----------|---------------------------------------------------|
|         |                                        | Hard Copy                            | Soft copy |                                                   |
| 2017-18 | 15462                                  | 162                                  | 15300     | 15462                                             |
| 2018-19 | 15462                                  | 162                                  | 15300     | 15462                                             |
| 2019-20 | 15462                                  | 162                                  | 15300     | 15462                                             |
| 2020-21 | 15462                                  | 162                                  | 15300     | 15462                                             |

Availability of digital library contents on exclusive server: **Yes**

Availability of digital library contents, if available then mention number of courses, number of e-books, etc.:

Table 10.18. **Details of digital library**

| Name of course                 | Digital Content | E-books | NPTEL |
|--------------------------------|-----------------|---------|-------|
| Civil Engineering              | 10              | 710     | 130   |
| Mechanical Engineering         | 12              | 1100    | 159   |
| E & E Engineering              | 15              | 575     | 75    |
| Computer Science & Engineering | 16              | 8016    | 92    |
| E&C Engineering                | 16              | 1530    | 94    |



|                                 |       |      |      |
|---------------------------------|-------|------|------|
| IP& Engineering                 | 8     | --   | --   |
| Automobile Engineering          | 3     | --   | 2    |
| IT                              | 9     | --   | --   |
| ISE                             | 16    | --   | --   |
| BT                              | 8     | --   | 34   |
| Mathematics                     | ..... | 226. | 73   |
| Physics                         | ..... | 88   | 72   |
| Chemistry                       | ..... | 86   | 90   |
| Biomedical Engineering          | ----  | 300  | ---  |
| Chemical Engineering            | ----- | 29   | ---- |
| Energy                          | ----- | 221  | ---  |
| Aeronautical Engineering        | ----- | 130  | ---- |
| Control, Robotics, Mechatronics | ----- | 101  | ---- |
| Automotive Engineering          | ----- | 123  | ---- |
| Engineering & Nanotechnology    | ----- | 123  | ---- |

Availability of an exclusive server : **Yes over intranet**

Availability over Intranet/Internet : **Yes**

Availability of exclusive space/room : **Yes**

Number of users per day : **30**

- **Accessibility to students: Yes.**

Library services on Internet/Intranet INDEST or other similar membership Archives is available

- **Support to students for self-learning activities**

The following facilities are created for self-learning / learning beyond syllabus:

1. A digital library is setup to facilitate online access of the information.
2. NPTEL (National Project on Technology Enhanced Learning): Access to online learning material prepared by IIT and other esteemed institutions are hosted on institution server.
3. Institute is registered as member of National Digital Library (NDL).
4. Institute is registered as a member of DELNET
5. 5000 CDs are mirrored in the server for supporting curriculum activities and learning beyond syllabus.
6. Virtual laboratory facility has been deployed in the campus.
7. Facilities are created in the library for MHRD initiatives like Swayam, Shakshat, Shodhaganga and E-Shodhasindhu.

#### 10.4.2 Internet (10)

Institute Marks : 10.00

Name of the Internet provider : Telexair

Available bandwidth : 1 Gbps

Wi Fi availability : Yes

Internet access in labs, classrooms, library and offices of all Departments: Yes

Security arrangements: Firewall Installed

**Annexure I**  
**(A) PROGRAM OUTCOME (POs)**

**Engineering Graduates will be able to:**

- 1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- 6. The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- 7. Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 11. Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

**(B) PROGRAM SPECIFIC OUTCOME (PSOs)**  
**Program should specify 2-4 program specific outcomes.**

|      |                                                                                                                                                                               |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      |                                                                                                                                                                               |
| PSO1 | To demonstrate the abilities to apply the basic science and engineering fundamentals to solve complex engineering problems in the society.                                    |
| PSO2 | To demonstrate the abilities to provide information and communication technology solutions using modern engineering and IT tools at affordable cost working as a team member. |
| PSO3 | To exhibit ethical, social and professional responsibilities and engage in life long learning.                                                                                |

## Declaration

The head of the institution needs to make a declaration as per the format given -

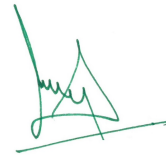
- I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines inforce as on date and the institutes hall fully abide by them.
- It is submitted that information provided in this Self Assessment Report is factually correct.
- I understand and agree that an appropriate disciplinary action against the Institute willbe initiated by the NBA. In case, any false statement/information is observed during pre-visit, visit, postvisit and subsequent to grant of accreditation.

**Head of the Institute**

Name : Dr S S Injaganeri

Designation : Principal

Signature :



Seal of The Institution :

PRINCIPAL,  
Basaveshwar Engineering College  
BAGALKOT.

**Place :** Bagalkot

**Date :** 19-04-2022 20:43:34