

22UHS001M	YOGA (COMMON TO ALL BRANCHES)	Credit : 00
L:T:P :0:0:2		CIE Marks : 50
Total Hours Per Semester :26		SEE Marks : 00

Semester	Course
IIISem	<ol style="list-style-type: none"> 1) Introduction of Yoga, Aim and Objectives of yoga,Prayer 2) Brief introduction of yogic practices for common man 3) Rules and regulations 4) Misconceptions of yoga 5) Suryanamaskara 6) Different types of Asanas <ol style="list-style-type: none"> a. Sitting b. Standing c. Proneline d. Supineline
IVSem	<ol style="list-style-type: none"> 1) Patanjali'sAshtangaYoga 2) Suryanamaskara 3) Different types of Asanas <ol style="list-style-type: none"> a. Sitting b. Standing c. Proneline d. Supineline Sitting 4) Pranayama 5) Kapalbhathi
VSem	<ol style="list-style-type: none"> 1) Patanjali'sAshtangaYoga 2) Suryanamaskara 3) Differenttypes of Asanas <ol style="list-style-type: none"> a. Sitting b. Standing c. Proneline d. Supineline 4) Kapalbhathi 5) Pranayama
VI Sem	<ol style="list-style-type: none"> 1) Patanjali's AshtangaYoga 2) Suryanamaskara 3) Different types of Asanas <ol style="list-style-type: none"> a. Sitting b. Standing c. Proneline d. Supineline 4) Kapalbhathi 5) Pranayama 6) ShatKriyas

Blown-Up Syllabus

Semester	Title	Content	No.of Hours
3rd Semester	Introduction of Yoga, Aim and Objectives of yoga, Prayer	Yoga, its origin, history and development. Yoga, its meaning, definitions. Different schools of yoga, importance of prayer	Total 26hrs 2hrs/week
	Brief introduction of yogic practices for common man	Yogic practices for common man to promote Positive health	
	Rules and regulations	Rules to be followed during yogic practices by practitioner	
	Misconceptions of yoga	Yoga its misconceptions, Difference between yogic and non yogic practices	
	Suryanamaskara	Suryanamaskar prayer and its meaning, Need, importance and benefits of Suryanamaskar 12 count, 2 rounds	
	Different types of Asanas a. Sitting 1. Padmasana 2. Vajrasana b. Standing 1. Vrikshana 2. Trikonasana c. Prone 1. Bhujangasana 2. Shalabhasana d. Supine 1. Utthitadvipadasana 2. Ardhalasana	Asana, Need, importance of Asana. Different types of asana. Asana its meaning by name, technique precautionary measures and benefits of each asana	
4th Semester	Patanjali's Ashtanga Yoga 1. Yama 2. Niyama	Patanjali's Ashtanga Yoga its need and importance. Yama: Ahimsa, satya, asteya, brahmacharya, aparigraha Niyama: shoucha, santosh, tapa, svaadhyaya, Eshvarapranidhan	Total 26hrs 2hrs/Week
	Suryanamaskara	Suryanamaskar 12 count 4 rounds	
	Different types of Asanas a. Sitting 1. Sukhasana 2. Paschimottanasana b. Standing 1. Ardhakati Chakrasana 2. Parshva Chakrasana c. Prone 1. Dhanurasana d. Supine 1. Halasana 2. Karna Peedasana	Asana, Need, importance of Asana. Different types of asana. Asana its meaning by name, technique, precautionary measures and benefits of each asana	
	Kapalabhati	Meaning, importance and benefits of Kapalabhati. 40 strokes/min 3 rounds	
	Pranayama-1. 1. Suryanuloma - Viloma 2. Chandranuloma - Viloma 3. Suryabhedana 4. Chandra Bhedana 5. Nadishodhana	Meaning, Need, importance of Pranayama. Different types. Meaning by name, technique, precautionary measures and benefits of each Pranayama	

5th Semester	Ashtanga Yoga 3.Asana 4.Pranayama 5.Pratyahara 6.Dharana	Patanjali's Ashtanga Yogait's need and importance.	Total 26hrs 2hrs/week
	Suryanamaskara	Suryanamaskar 12count 6rounds	
	Different types of Asanas a. Sitting 1. ArdhaUshtrasana 2.Vakrasana b. Standing 1.UrdhvaHastothanasana 2.Hastapadasana c. Proneline 1.Padangushtha 2. Dhanurasana d. Supineline 1.Sarvangasana 2.Chakraasana	Asana, Need, importance of Asana. Different types.Asana's meaning by name, technique, precautionary measures and benefits of each asana	
	Kapalabhati	Revision of practice 50strokes/min 3rounds	
	Pranayama–1.SuryaBhedana 2.Ujjayi	Meaning, Need, importance of Pranayama.Different types.Meaning by name, technique, Precautionary measures and benefits of each Pranayama	
6th Semester	Ashtanga Yoga 7.Dhyana(Meditation) 8.Samadhi	Patanjali's Ashtanga Yoga its need and importance.	Total 26hrs 2hrs/week
	Suryanamaskara	Revision of practice 12 count 8 rounds	
	Different types of Asanas a. Sitting 1. AakarnaDhanurasana 2.YogamudrainPadmasana b. Standing 1.Parivritta 2.Trikonasana 3.Utkatasana c. Proneline 1.PoornaBhujangasana /Rajakapotasana d. Supineline 1.Navasana/Noukasana 2.Pavanamuktasana	Asana, Need, importance of Asana. Different types, Asana by name, technique, precautionary erasures and benefits of each asana	
	Kapalabhati	Revision of practice 60 strokes/min 3rounds	
	Pranayama– 1.Sheetal 2.Sheektari 3.Bhastrika 4.Bhramari	Meaning, Need, importance of Pranayama.Different types.Meaning by name, technique, precautionary measures and benefits of each Pranayama	
ShatKriyas 1. Jalaneti&sutraneti 2. Nouli(onlyformen) 3. SheetkarmaKapalabhati	Meaning, Need, importance of Shatkriya.Different types.Meaning by name, technique, precautionary measures and benefits of each Kriya		

BookforReference:

1. SwamiKuvulyananda :Asma(Kavalyadhama,Lonavala)
2. Tiwari,OP :AsanaWhyandHow
3. Ajitkumar : YogaPravesha(Kannada)
4. SwamiSatyanandaSaraswati :AsanaPranayama,Mudra,Bandha
(BiharSchoolof yoga,Munger)
5. SwamiSatyanandaSaraswati :SuryaNamaskar
(BiharSchoolof yoga,Munger)
6. NagendraHR :Theart andscienceofPranayama
7. Tiruka :Shatkriyegalu(Kannada)
8. IyengarBKS :YogaPradipika(Kannada)
9. IyengarBKS :LightonYoga(English)
10. S.K.Kuppasta : Samagra Yoga Darshini(Kannada)

Scheme of Assessment:

WEIGHTAGE	100%
	CIE
At the End of 3 rd Semester	25
At the End of 4 th Semester	25
At the End of 5 th Semester	25
At the End of 6 th Semester	25
TOTALMARKS FOR THECOURSE	100

Note: 1. No Semester End Examinations.

22UHS002M	National Service Scheme (NSS) (COMMON TO ALL BRANCHES)	Credit: 00
L:T:P :0:0:2		CIE Marks : 50
Total Hours Per Semester :26		SEE Marks :00

Course Objectives: National Service Scheme (NSS) will enable the students to:

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1. Understand the community in general in which they work.
2. Identify the needs and problems of the community and involve them in problem –solving.
3. Develop among themselves a sense of social & civic responsibility & utilize their knowledge in finding practical solutions to individual and community problems.
4. Develop competence required for group-living and sharing of responsibilities & gain in mobilizing community participation to acquire leadership qualities and democratic attitudes.
5. Develop capacity to meet emergencies and natural disasters & practice national integration and social harmony in general.

Contents	26 Hours
<ol style="list-style-type: none"> 1. Organic farming, Indian Agriculture (Past, Present and Future) Connectivity for marketing. 2. Waste management– Public, Private and Govt organization, 5 R's. 3. Setting of the information imparting club for women leading to contribution in social and economic issues. 4. Water conservation techniques – Role of different stakeholders– Implementation. 5. Preparing an actionable business proposal for enhancing the village income and approach for implementation. 6. Helping local schools to achieve good results and enhance their enrolment in Higher/ technical/ vocational education. 7. Developing Sustainable Water management system for rural areas and implementation approaches. 8. Contribution to any national level initiative of Government of India. Foreg. Digital India, Skill India, Swachh Bharat, Atmanirbhar Bharath, Make in India, Mudra scheme, Skill development programs etc. 9. Spreading public awareness under rural outreach programs.(minimum 5 programs). 10. Social connect and responsibilities. 	

11. Plantation and adoption of plants. Know your plants.

12. Organize National integration and social harmony events /workshops /seminars. (Minimum 02 programs).

13. Govt. school Rejuvenation and helping them to achieve good infrastructure.

NOTE:

- Student/s in individual or in a group Should select any one activity in the beginning of each semester till end of that respective semester for successful completion as per the instructions of NSS officer with the consent of HOD of the department.
- At the end of every semester, activity report should be Submitted for evaluation.

Course outcomes (Course Skill Set):

At the end of the course, the student will be able to:

- CO1: Understand the importance of his / her responsibilities towards society.
- CO2: Analyse the environmental and societal problems/issues and will be able to design solutions
For the same
- CO3: Evaluate the existing system and to propose practical solutions for the same for sustainable development.
- CO4: Implement government or self-driven projects effectively in the field.
- CO5: Develop capacity to meet emergencies and natural disasters & practice national integration and social harmony in general.

ASSESSMENTANDEVALUATIONPATTERN

WEIGHTAGE	100%
	CIE
At the End of 3 rd Semester	25
At the End of 4 th Semester	25
At the End of 5 th Semester	25
At the End of 6 th Semester	25
TOTALMARKS FOR THECOURSE	100

Blown-Up Syllabus

Distribution of Activities - Semester wise from 3rd to 6th semester

Semester	Topics / Activities to be Covered
3rd Semester	<ol style="list-style-type: none"> 1. Organic farming, Indian Agriculture (Past, Present and Future) Connectivity for marketing. 2. Waste management– Public, Private and Govt organization, 5 R's. 3. Setting of the information imparting club for women leading to contribution in social and economic issues.
4th Semester	<ol style="list-style-type: none"> 4. Water conservation techniques – Role of different stakeholders– Implementation. 5. Preparing an actionable business proposal for enhancing the village income and approach for implementation. 6. Helping local schools to achieve good results and enhance their enrolment in Higher/ technical/ vocational education.
5th Semester	<ol style="list-style-type: none"> 7. Developing Sustainable Water management system for rural areas and implementation approaches. 8. Contribution to any national level initiative of Government of India. Foreg. Digital India, Skill India, Swachh Bharat, Atmanirbhar Bharath, Make in India, Mudra scheme, Skill development programs etc. 9. Spreading public awareness under rural outreach programs.(minimum 5 programs). 10. Social connect and responsibilities.
6th Semester	<ol style="list-style-type: none"> 11. Plantation and adoption of plants. Know your plants. 12. Organize National integration and social harmony events /workshops /seminars. (Minimum 02 programs). 13. Govt. school Rejuvenation and helping them to achieve good infrastructure.

Sl No	Topic	Group size	Location	Activity execution	Reporting	Evaluation Of the Topic
1.	Organic farming, Indian Agriculture (Past, Present and Future) Connectivity for marketing.	May be individual or team	Farmers land/Villages/ roadside/ community area/ College campus etc.....	Site selection /proper consultation/Continuous monitoring/ Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
2.	Waste management– Public, Private and Govt organization, 5 R's.	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	Site selection /proper consultation/Continuous monitoring/ Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
3.	Setting of the information imparting club for women leading to contribution in social and economic issues.	May be individual or team	Women empowerment groups/ Consulting NGOs & Govt Teams / College campus etc.....	Group selection/proper consultation/Continuous monitoring/ Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
4.	Water conservation techniques – Role of different stakeholders– Implementation.	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	site selection / proper consultation/Continuous monitoring/ Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
5.	Preparing an actionable business proposal for enhancing the village income and approach for implementation.	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	Group selection/proper consultation/Continuous monitoring/ Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
6.	Helping local schools to achieve good results and enhance their enrolment in Higher/ technical/ vocational	May be individual or team	Local government / private/ aided schools/Government Schemes officers/ etc.....	School selection/proper consultation/Continuous monitoring/ Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer

	education.					
7.	Developing Sustainable Water management system for rural areas and implementation approaches.	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	site selection/proper consultation/Continuous monitoring/ Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
8.	Contribution to any national level initiative of Government of India. For eg. Digital India, Skill India, Swachh Bharat, Atmanirbhar Bharath, Make in India, Mudra scheme, Skill development programs etc.	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	Group selection/proper consultation/Continuous monitoring / Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
9.	Spreading public awareness under rural outreach programs.(minimum 5 programs). // Social connect and responsibilities.	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	Group selection/proper consultation/Continuous monitoring / Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
10.	Plantation and adoption of plants. Know your plants.	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	Place selection/proper consultation/Continuous monitoring / Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
11.	Organize National integration and social harmony events /workshops /seminars. (Minimum 02 programs).	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	Place selection/proper consultation/Continuous monitoring / Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer

12.	Govt. school Rejuvenation and helping them to achieve good infrastructure.	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	Place selection/proper consultation/Continuous monitoring / Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
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Pedagogy – Guidelines, it may differ depending on local resources available for the study as well as environment and climatic differences as well as location time of execution.

Plan of Action (Execution of Activities For Each Semester)

Sl.N O	Practice Session Description
1	Lecture session by NSS Officer
2	Students Presentation on Topics
3	Presentation - 1 ,Selection of topic, PHASE - 1
4	Commencement of activity and its progress - PHASE - 2
5	Execution of Activity
6	Execution of Activity
7	Execution of Activity
8	Execution of Activity
9	Execution of Activity
10	Case study based Assessment, Individual performance
11	Sector wise study and its consolidation
12	Video based seminar for 10 minutes by each student At the end of semester with Report.

22UHS003M	PHYSICAL EDUCATION ANDSPORTS	Credit: 00
L:T:P :0:0:2	(PE)	CIE Marks: 50
Total Hours Per Semester :26	(COMMON TO ALL BRANCHES)	SEE Marks: 00

Semester	Course
IIISem	FitnessComponents Kabaddi/KhoKho
IVSem	Athletics Volleyball/Throwball /Football/Netball/Basketball
V Sem	Athletics Hockey /Cricket/Baseball
VISem	IndividualGames Handball/Badminton

Blown-Up Syllabus

Semester	Course Title	Content	No. of Hours
3 rd Sem	Fitness Components	Meaning and Importance, Fit India Movement, Definition of fitness, Components of fitness, Benefits of fitness, Types of fitness and Fitness tips. Practical Components: Speed, Strength, Endurance, Flexibility, and Agility	Total 26 hrs 2 hrs/ week
	KHOKHO	A. Fundamental skills 1. Skills in Chasing : Sit on the box (Parallel & Bullet toe method), Get up from the box (Proximal & Distal foot method), Give Kho (Simple, Early, Late & Judgment), Pole Turn, Pole Dive, Tapping, Hammering, Rectification of foul. 2. Skills in running: Chain Play, Ring play and Chain & Ring mixed play. 3. Game practice with application of Rules and Regulations. B. Rules and their interpretations and duties of the officials.	
	KABADDI	A. Fundamental skills 1. Skills in Raiding: Touching with hands, Use of leg-toe touch, squat leg thrust, sidekick, mulekick, arrowflykick, crossing of baulk line. Crossing of Bonus line. 2. Skills of holding the raider: Various formations, catching from particular position, different catches, catching formation and techniques. 3. Additional skills in raiding : Escaping from various holds, Techniques of escaping from chain formation, offense and defense. 4. Game practice with application of Rules and Regulations. B. Rules and their interpretations and duties of the officials	

4 th Sem	AthleticsTrack-Sprints Jumps- LongJump Throws-ShotPut	TrackEvents Starting Techniques: Standing start and Crouch start(its variations)use of Starting Block. Acceleration with proper running techniques. Finishing technique: RunThrough, Forward Lunging and Shoulder Shrug. Long Jump : ApproachRun,Take-off,Flight in the air(HangStyle/HitchKick)andLanding Shotput :Holding the Shot,Placement, InitialStance,Glide, Delivery Stanceand Recovery(PerryO’BrienTechnique	Total26hrs
	AthleticsTrack-110&400MtrsHurdles Jumps-HighJump Throws-DiscusThrow	110Mtrsand 400Mtrs: HurdlingTechnique:LeadlegTechnique,TraillegTechnique,SideHurdling,Over the Hurdles Crouch start(itsvariations)use of Starting Block. Approach to First Hurdles, InBetween Hurdles,LastHurdlestoFinishing. Highjump :ApproachRun,Take-off,BarClearance(Straddle)and Landing. DiscusThrow :Holding the Discus, InitialStancePrimarySwing,Turn, ReleaseandRecovery(Rotationinthecircle).	
	VOLLEYBALL	A.Fundamentalskills 1. Service:Underarmservice,Sidearmservice,Tennisservice,Floatingservice. 2. Pass:Underarmpass, Overhead pass. 3. SpikingandBlocking. 4. GamepracticewithapplicationofRulesandRegulations B. Rulesandtheirinterpretationanddutiesofofficials.	
	THROWBALL	A. Fundamentalskills: Overhandservice,Sidearmservice,twohandcatching,onehandoverheadreturn,sidearmreturn. B. Rulesandtheirinterpretationsanddutiesof officials	
	FOOTBALL	A. FundamentalSkills 1. Kicking: Kicking the ball with inside of the foot, Kicking theball with Full Instepofthefoot, Kickingtheball with InnerInstep ofthefoot,KickingtheballwithOuterInstep ofthefootandLoftedKick. 2. Trapping:Trapping- theRollingball,andtheBouncingballwith soleofthefoot. 3. Dribbling:Dribblingtheballwith Instepofthefoot, DribblingtheballwithInnerandOuterInstepofthefoot. 4. Heading:Instanding,runningandjumpingcondition. 5. Throw-in:Standingthrow-inandRunningthrow-in. 6. Feinting:Withthelowerlimbandupperpartofthefoot. 7. Tackling:SimpleTackling,SlideTackling. 8. GoalKeeping:CollectionofBall,Ballclearance-kicking,throwinganddeflecting. 9. GamepracticewithapplicationofRulesandRegulations. B. Rulesandtheirinterpretationanddutiesofofficials.	

	BASKETBALL	<p>A. FundamentalSkills</p> <ol style="list-style-type: none"> 1. Passing:TwohandChestPass, TwohandsBounce Pass,OnehandBaseballPass,SidearmPass,Overhead Pass,HookPass. 2. Receiving:Twohandreceiving,Onehandreceiving, Receivinginstationaryposition,Receivingwhile JumpingandReceivingwhileRunning. 3. Dribbling:Howtostartdribble,dropdribble,High Dribble,LowDribble,ReverseDribble,Rolling Dribble. 4. Shooting:Lay-upshot anditsvariations,One hand Setshot,Two handsjumpshot,Hookshot,FreeThrow. 5. Rebounding:DefensivereboundandOffensiverebound. 6. IndividualDefence:Guardingtheplayerwiththeball andwithouttheball,Pivoting. 7. Gamepracticewith applicationofRulesandRegulations. <p>B. Rulesandtheirinterpretation and dutiesofofficials</p>	
	NETBALL	<p>A. Fundamentalskills</p> <ol style="list-style-type: none"> 1. Catching: onehanded,twohanded,with feetgroundedand inflight. 2. Throwing (Different passes and their uses): One hand passes (shoulder,highshoulder,underarm,bounce,lob), twohandpasses(Push,overheadandbounce). 3. Footwork:Landingononefoot,landingontwo feet,Pivot,Runningp ass. 4. Shooting:Onehand,forwardstepshot,andbackwardstepshot. 5. Techniquesof freedodgeandsprint,suddensprint, sprintandstop,sprintingwithchangeatspeed. 6. Defending:Markingtheplayer,markingtheball, blocking,insidethecircle,outsidethecircle. thecircleedgeagainstthepassing. 7. Intercepting:Passandshot. 8. Gamepracticewith applicationofRulesandRegulations. <p>B. Rulesandtheirinterpretation and dutiesofofficials</p>	

5 th Sem	<u>Athletics Track-</u> <u>Relays</u> <u>Jumps- Triple</u> <u>Jump Throws-</u> <u>Javelin Throw</u>	Relay Race: Starting, Baton Holding/Carrying, Baton Exchange in between zone, and Finishing Triple Jump: Approach Run, Take-off, Flight in the Hop, Step, Jump and Landing Javelin Throw: Grip, Carry, and Recovery (3/5 Impulse stride). Release	Total 26hrs 2hrs/week
	Athletics Combined Events- Heptathlon & Decathlon Jumps- Pole Vault Throws- Hammer Throw	Combined Events: Heptathlon all the 7 events Decathlon: All 10 Events Pole Vault: Approach Run, Planting the Pole, Take-off, Bar Clearance and Landing. Hammer Throw: Holding the Hammer, Initial Stance Primary Swing, Turn, Release and Recovery (Rotation in the circle).	
	HOCKEY	A. Fundamental Skills 1. Passing: Short pass, Long pass, push pass, hit 2. Trapping. 3. Dribbling and Dozing. 4. Penalty stroke practice. 5. Penalty corner practice. 6. Tackling: Simple Tackling, Slide Tackling. 7. Goal Keeping, Ball clearance-kicking, and deflecting. 8. Game practice with application of Rules and Regulations. B. Rules and their interpretation and duties of officials.	
	CRICKET	A. Fundamental Skills 1. Batting- Forward Defense Stroke, Backward Defense Stroke, Off Drive, On Drive, Straight Drive, Cover Drive, Square Cut. 2. Bowling- Out-swing, In-swing, Off Break, Leg Break and Googly. 3. Fielding: Catching - The High Catch, The Skim Catch, The Close Catch and throwing at the stumps from different angles. Long Barrier and Throw, Short Throw, Long Throw, Throwing on the Turn. 4. Wicket Keeping B. Rules and their interpretation and duties of officials	
BASEBALL	A. Fundamental Skills Player Stances – walking, extending walking, L stance, cat stance Grip – standard grip, choke grip Batting – swing and bunt. Pitching Baseball: slider, fast pitch, curve ball, drop ball, rise ball, change up, knuckle ball, screw ball, Rules and their interpretation and duties of officials.		

6 th Sem	Individual Games SHUTTLEBADMINTON	A. Fundamentals skills 1. Basic Knowledge: Various parts of the Racket and Grip. 2. Service: Short service, Long service, Long-high service. 3. Shots: Overhead shot, Defensive clear shot, Attacking clear shot, Drop shot, Net shot, Smash. 4. Game practice with application of Rules and Regulations. B. Rules and their interpretations and duties of the officials.	Total 26hrs s 2hrs/week
	TABLE TENNIS	A. Fundamentals skills 1. Basic Knowledge: Various parts of the Racket and Grip (Shake Hand & Pen Hold Grip). 2. Stance: Alternate & Parallel. 3. Push and Service: Backhand & Forehand. 4. Chop: Backhand & Forehand. 5. Receive: Push and Chop with both Backhand & Forehand. 6. Game practice with application of Rules and Regulations. Rules and their interpretations and duties of the Officials	
	HANDBALL	A. Fundamental Skills 1. Catching, Throwing and Ball control. 2. Goal Throws: Jump shot, Center shot, Dive shot, Reverse shot. 3. Dribbling: High and low. 4. Attack and counter attack, simple counter attack, counter attack from two wings and center. 5. Blocking, Goal Keeping and Defensive skills. 6. Game practice with application of Rules and Regulations. B. Rules and their interpretation and duties of officials	
	BALL BADMINTON	A. Fundamentals skills 1. Basic Knowledge: Various parts of the Racket and Grip. 2. Service: Short service, Long service, Long-high service. 3. Shots: Overhead shot, Defensive clear shot, Attacking clear shot, Drop shot, Net shot, Smash. 4. Game practice with application of Rules and Regulations. B. Rules and their interpretation and duties of officials	

Scheme of Assessment:

WEIGHTAGE	100%	(100%)
	CIE	CIE
At the End of 3 rd Semester	20	25
At the End of 4 th Semester	20	25
At the End of 5 th Semester	20	25
At the End of 6 th Semester	20	25
Written assignment/Quiz/Report writing/	20	-
TOTAL MARKS FOR THE COURSE	100	100

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IVSem	<ol style="list-style-type: none"> 1) Patanjali'sAshtangaYoga 2) Suryanamaskara 3) Different types of Asanas <ol style="list-style-type: none"> a. Sitting b. Standing c. Proneline d. Supineline Sitting 4) Pranayama 5) Kapalbhathi
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VI Sem	<ol style="list-style-type: none"> 1) Patanjali's AshtangaYoga 2) Suryanamaskara 3) Different types of Asanas <ol style="list-style-type: none"> a. Sitting b. Standing c. Proneline d. Supineline 4) Kapalbhathi 5) Pranayama 6) ShatKriyas

Blown-Up Syllabus

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	Brief introduction of yogic practices for common man	Yogic practices for common man to promote Positive health	
	Rules and regulations	Rules to be followed during yogic practices by practitioner	
	Misconceptions of yoga	Yoga its misconceptions, Difference between yogic and non yogic practices	
	Suryanamaskara	Suryanamaskar prayer and its meaning, Need, importance and benefits of Suryanamaskar 12 count, 2 rounds	
	Different types of Asanas a. Sitting 1. Padmasana 2. Vajrasana b. Standing 1. Vrikshana 2. Trikonasana c. Prone 1. Bhujangasana 2. Shalabhasana d. Supine 1. Utthitadvipadasana 2. Ardhalasana	Asana, Need, importance of Asana. Different types of asana. Asana its meaning by name, technique precautionary measures and benefits of each asana	
4th Semester	Patanjali's Ashtanga Yoga 1. Yama 2. Niyama	Patanjali's Ashtanga Yoga its need and importance. Yama: Ahimsa, satya, asteya, brahmacharya, aparigraha Niyama: shoucha, santosh, tapa, svaadhyaya, Eshvarapranidhan	Total 26hrs 2hrs/Week
	Suryanamaskara	Suryanamaskar 12 count 4 rounds	
	Different types of Asanas a. Sitting 1. Sukhasana 2. Paschimottanasana b. Standing 1. Ardhakati Chakrasana 2. Parshva Chakrasana c. Prone 1. Dhanurasana d. Supine 1. Halasana 2. Karna Peedasana	Asana, Need, importance of Asana. Different types of asana. Asana its meaning by name, technique, precautionary measures and benefits of each asana	
	Kapalabhati	Meaning, importance and benefits of Kapalabhati. 40 strokes/min 3 rounds	
	Pranayama-1. 1. Suryanuloma - Viloma 2. Chandranuloma - Viloma 3. Suryabhedana 4. Chandra Bhedana 5. Nadishodhana	Meaning, Need, importance of Pranayama. Different types. Meaning by name, technique, precautionary measures and benefits of each Pranayama	

5th Semester	Ashtanga Yoga 3.Asana 4.Pranayama 5.Pratyahara 6.Dharana	Patanjali's Ashtanga Yogait's need and importance.	Total 26hrs 2hrs/week
	Suryanamaskara	Suryanamaskar 12count 6rounds	
	Different types of Asanas a. Sitting 1. ArdhaUshtrasana 2.Vakrasana b. Standing 1.UrdhvaHastothanasana 2.Hastapadasana c. Proneline 1.Padangushtha 2. Dhanurasana d. Supineline 1.Sarvangasana 2.Chakraasana	Asana, Need, importance of Asana. Different types.Asana's meaning by name, technique, precautionary measures and benefits of each asana	
	Kapalabhati	Revision of practice 50strokes/min 3rounds	
	Pranayama–1.SuryaBhedana 2.Ujjayi	Meaning, Need, importance of Pranayama.Different types.Meaning by name, technique, Precautionary measures and benefits of each Pranayama	
6th Semester	Ashtanga Yoga 7.Dhyana(Meditation) 8.Samadhi	Patanjali's Ashtanga Yoga its need and importance.	Total 26hrs 2hrs/week
	Suryanamaskara	Revision of practice 12 count 8 rounds	
	Different types of Asanas a. Sitting 1. AakarnaDhanurasana 2.YogamudrainPadmasana b. Standing 1.Parivritta 2.Trikonasana 3.Utkatasana c. Proneline 1.PoornaBhujangasana /Rajakapotasana d. Supineline 1.Navasana/Noukasana 2.Pavanamuktasana	Asana, Need, importance of Asana. Different types, Asana by name, technique, precautionary erasures and benefits of each asana	
	Kapalabhati	Revision of practice 60 strokes/min 3rounds	
	Pranayama– 1.Sheetal 2.Sheektari 3.Bhastrika 4.Bhramari	Meaning, Need, importance of Pranayama.Different types.Meaning by name, technique, precautionary measures and benefits of each Pranayama	
ShatKriyas 1. Jalaneti&sutraneti 2. Nouli(onlyformen) 3. SheetkarmaKapalabhati	Meaning, Need, importance of Shatkriya.Different types.Meaning by name, technique, precautionary measures and benefits of each Kriya		

BookforReference:

1. SwamiKuvulyananda :Asma(Kavalyadhama,Lonavala)
2. Tiwari,OP :AsanaWhyandHow
3. Ajitkumar : YogaPravesha(Kannada)
4. SwamiSatyanandaSaraswati :AsanaPranayama,Mudra,Bandha
(BiharSchoolof yoga,Munger)
5. SwamiSatyanandaSaraswati :SuryaNamaskar
(BiharSchoolof yoga,Munger)
6. NagendraHR :Theart andscienceofPranayama
7. Tiruka :Shatkriyegalu(Kannada)
8. IyengarBKS :YogaPradipika(Kannada)
9. IyengarBKS :LightonYoga(English)
10. S.K.Kuppasta : Samagra Yoga Darshini(Kannada)

Scheme of Assessment:

WEIGHTAGE	100%
	CIE
At the End of 3 rd Semester	25
At the End of 4 th Semester	25
At the End of 5 th Semester	25
At the End of 6 th Semester	25
TOTALMARKS FOR THECOURSE	100

Note: 1. No Semester End Examinations.

22UHS002M	National Service Scheme (NSS) (COMMON TO ALL BRANCHES)	Credit: 00
L:T:P :0:0:2		CIE Marks : 50
Total Hours Per Semester :26		SEE Marks :00

Course Objectives: National Service Scheme (NSS) will enable the students to:

Course objectives: National Service Scheme (NSS) will enable the students to:

1. Understand the community in general in which they work.
2. Identify the needs and problems of the community and involve them in problem –solving.
3. Develop among themselves a sense of social & civic responsibility & utilize their knowledge in finding practical solutions to individual and community problems.
4. Develop competence required for group-living and sharing of responsibilities & gain in mobilizing community participation to acquire leadership qualities and democratic attitudes.
5. Develop capacity to meet emergencies and natural disasters & practice national integration and social harmony in general.

Contents	26 Hours
<ol style="list-style-type: none"> 1. Organic farming, Indian Agriculture (Past, Present and Future) Connectivity for marketing. 2. Waste management– Public, Private and Govt organization, 5 R's. 3. Setting of the information imparting club for women leading to contribution in social and economic issues. 4. Water conservation techniques – Role of different stakeholders– Implementation. 5. Preparing an actionable business proposal for enhancing the village income and approach for implementation. 6. Helping local schools to achieve good results and enhance their enrolment in Higher/ technical/ vocational education. 7. Developing Sustainable Water management system for rural areas and implementation approaches. 8. Contribution to any national level initiative of Government of India. Foreg. Digital India, Skill India, Swachh Bharat, Atmanirbhar Bharath, Make in India, Mudra scheme, Skill development programs etc. 9. Spreading public awareness under rural outreach programs.(minimum 5 programs). 10. Social connect and responsibilities. 	

11. Plantation and adoption of plants. Know your plants.

12. Organize National integration and social harmony events /workshops /seminars. (Minimum 02 programs).

13. Govt. school Rejuvenation and helping them to achieve good infrastructure.

NOTE:

- Student/s in individual or in a group Should select any one activity in the beginning of each semester till end of that respective semester for successful completion as per the instructions of NSS officer with the consent of HOD of the department.
- At the end of every semester, activity report should be Submitted for evaluation.

Course outcomes (Course Skill Set):

At the end of the course, the student will be able to:

- CO1: Understand the importance of his / her responsibilities towards society.
- CO2: Analyse the environmental and societal problems/issues and will be able to design solutions
For the same
- CO3: Evaluate the existing system and to propose practical solutions for the same for sustainable
development.
- CO4: Implement government or self-driven projects effectively in the field.
- CO5: Develop capacity to meet emergencies and natural disasters & practice national integration
and social harmony in general.

ASSESSMENTANDEVALUATIONPATTERN

WEIGHTAGE	100%
	CIE
At the End of 3 rd Semester	25
At the End of 4 th Semester	25
At the End of 5 th Semester	25
At the End of 6 th Semester	25
TOTALMARKS FOR THECOURSE	100

Blown-Up Syllabus

Distribution of Activities - Semester wise from 3rd to 6th semester

Semester	Topics / Activities to be Covered
3rd Semester	<ol style="list-style-type: none"> 1. Organic farming, Indian Agriculture (Past, Present and Future) Connectivity for marketing. 2. Waste management– Public, Private and Govt organization, 5 R's. 3. Setting of the information imparting club for women leading to contribution in social and economic issues.
4th Semester	<ol style="list-style-type: none"> 4. Water conservation techniques – Role of different stakeholders– Implementation. 5. Preparing an actionable business proposal for enhancing the village income and approach for implementation. 6. Helping local schools to achieve good results and enhance their enrolment in Higher/ technical/ vocational education.
5th Semester	<ol style="list-style-type: none"> 7. Developing Sustainable Water management system for rural areas and implementation approaches. 8. Contribution to any national level initiative of Government of India. Foreg. Digital India, Skill India, Swachh Bharat, Atmanirbhar Bharath, Make in India, Mudra scheme, Skill development programs etc. 9. Spreading public awareness under rural outreach programs.(minimum 5 programs). 10. Social connect and responsibilities.
6th Semester	<ol style="list-style-type: none"> 11. Plantation and adoption of plants. Know your plants. 12. Organize National integration and social harmony events /workshops /seminars. (Minimum 02 programs). 13. Govt. school Rejuvenation and helping them to achieve good infrastructure.

Sl No	Topic	Group size	Location	Activity execution	Reporting	Evaluation Of the Topic
1.	Organic farming, Indian Agriculture (Past, Present and Future) Connectivity for marketing.	May be individual or team	Farmers land/Villages/ roadside/ community area/ College campus etc.....	Site selection /proper consultation/Continuous monitoring/ Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
2.	Waste management– Public, Private and Govt organization, 5 R's.	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	Site selection /proper consultation/Continuous monitoring/ Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
3.	Setting of the information imparting club for women leading to contribution in social and economic issues.	May be individual or team	Women empowerment groups/ Consulting NGOs & Govt Teams / College campus etc.....	Group selection/proper consultation/Continuous monitoring/ Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
4.	Water conservation techniques – Role of different stakeholders– Implementation.	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	site selection / proper consultation/Continuous monitoring/ Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
5.	Preparing an actionable business proposal for enhancing the village income and approach for implementation.	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	Group selection/proper consultation/Continuous monitoring/ Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
6.	Helping local schools to achieve good results and enhance their enrolment in Higher/ technical/ vocational	May be individual or team	Local government / private/ aided schools/Government Schemes officers/ etc.....	School selection/proper consultation/Continuous monitoring/ Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer

	education.					
7.	Developing Sustainable Water management system for rural areas and implementation approaches.	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	site selection/proper consultation/Continuous monitoring/ Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
8.	Contribution to any national level initiative of Government of India. For eg. Digital India, Skill India, Swachh Bharat, Atmanirbhar Bharath, Make in India, Mudra scheme, Skill development programs etc.	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	Group selection/proper consultation/Continuous monitoring / Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
9.	Spreading public awareness under rural outreach programs.(minimum 5 programs). // Social connect and responsibilities.	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	Group selection/proper consultation/Continuous monitoring / Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
10.	Plantation and adoption of plants. Know your plants.	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	Place selection/proper consultation/Continuous monitoring / Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
11.	Organize National integration and social harmony events /workshops /seminars. (Minimum 02 programs).	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	Place selection/proper consultation/Continuous monitoring / Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer

12.	Govt. school Rejuvenation and helping them to achieve good infrastructure.	May be individual or team	Villages/ City Areas / Grama panchayat/ public associations/Government Schemes officers/ campus etc.....	Place selection/proper consultation/Continuous monitoring / Information board	Report should be submitted by individual to the concerned evaluation authority	Evaluation as per the rubrics Of scheme and syllabus by NSS officer
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Pedagogy – Guidelines, it may differ depending on local resources available for the study as well as environment and climatic differences as well as location time of execution.

Plan of Action (Execution of Activities For Each Semester)

Sl.N O	Practice Session Description
1	Lecture session by NSS Officer
2	Students Presentation on Topics
3	Presentation - 1 ,Selection of topic, PHASE - 1
4	Commencement of activity and its progress - PHASE - 2
5	Execution of Activity
6	Execution of Activity
7	Execution of Activity
8	Execution of Activity
9	Execution of Activity
10	Case study based Assessment, Individual performance
11	Sector wise study and its consolidation
12	Video based seminar for 10 minutes by each student At the end of semester with Report.

22UHS003M	PHYSICAL EDUCATION ANDSPORTS	Credit: 00
L:T:P :0:0:2	(PE)	CIE Marks: 50
Total Hours Per Semester :26	(COMMON TO ALL BRANCHES)	SEE Marks: 00

Semester	Course
IIISem	FitnessComponents Kabaddi/KhoKho
IVSem	Athletics Volleyball/Throwball /Football/Netball/Basketball
V Sem	Athletics Hockey /Cricket/Baseball
VISem	IndividualGames Handball/Badminton

Blown-Up Syllabus

Semester	Course Title	Content	No. of Hours
3 rd Sem	Fitness Components Speed Strength Endurance Agility Flexibility.	Meaning and Importance, Fit India Movement, Definition of fitness, Components of fitness, Benefits of fitness, Types of fitness and Fitness tips. Practical Components: Speed, Strength, Endurance, Flexibility, and Agility	Total 26 hrs 2 hrs/ week
	KHOKHO	A. Fundamental skills 1. Skills in Chasing : Sit on the box (Parallel & Bullet toe method), Get up from the box (Proximal & Distal foot method), Give Kho (Simple, Early, Late & Judgment), Pole Turn, Pole Dive, Tapping, Hammering, Rectification of foul. 2. Skills in running: Chain Play, Ring play and Chain & Ring mixed play. 3. Game practice with application of Rules and Regulations. B. Rules and their interpretations and duties of the officials.	
	KABADDI	A. Fundamental skills 1. Skills in Raiding: Touching with hands, Use of leg-toe touch, squat leg thrust, sidekick, mulekick, arrowflykick, crossing of baulk line. Crossing of Bonus line. 2. Skills of holding the raider: Various formations, catching from particular position, different catches, catching formation and techniques. 3. Additional skills in raiding : Escaping from various holds, Techniques of escaping from chain formation, offense and defense. 4. Game practice with application of Rules and Regulations. B. Rules and their interpretations and duties of the officials	

4 th Sem	AthleticsTrack-Sprints Jumps- LongJump Throws-ShotPut	TrackEvents Starting Techniques: Standing start and Crouch start(its variations)use of Starting Block. Acceleration with proper running techniques. Finishing technique: RunThrough, Forward Lunging and Shoulder Shrug. Long Jump : ApproachRun,Take-off,Flight in the air(HangStyle/HitchKick)andLanding Shotput :Holding the Shot,Placement, InitialStance,Glide, Delivery Stanceand Recovery(PerryO’BrienTechnique	Total26hrs
	AthleticsTrack-110&400MtrsHurdles Jumps-HighJump Throws-DiscusThrow	110Mtrsand 400Mtrs: HurdlingTechnique:LeadlegTechnique,TraillegTechnique,SideHurdling,Over the Hurdles Crouch start(itsvariations)use of Starting Block. Approach to First Hurdles, InBetween Hurdles,LastHurdlestoFinishing. Highjump :ApproachRun,Take-off,BarClearance(Straddle)and Landing. DiscusThrow :Holding the Discus, InitialStancePrimarySwing,Turn, ReleaseandRecovery(Rotationinthecircle).	
	VOLLEYBALL	A.Fundamentalskills 1. Service:Underarmservice,Sidearmservice,Tennisservice,Floatingservice. 2. Pass:Underarmpass, Overhead pass. 3. SpikingandBlocking. 4. GamepracticewithapplicationofRulesandRegulations B.Rulesandtheirinterpretationanddutiesofofficials.	
	THROWBALL	A. Fundamentalskills: Overhandservice,Sidearmservice,twohandcatching,onehandoverheadreturn,sidearmreturn. B. Rulesandtheirinterpretationsanddutiesof officials	
	FOOTBALL	A. FundamentalSkills 1. Kicking: Kicking the ball with inside of the foot, Kicking theball with Full Instepofthefoot, Kickingtheball with InnerInstep ofthefoot,KickingtheballwithOuterInstep ofthefootandLoftedKick. 2. Trapping:Trapping- theRollingball,andtheBouncingballwith soleofthefoot. 3. Dribbling:Dribblingtheballwith Instepofthefoot, DribblingtheballwithInnerandOuterInstepofthefoot. 4. Heading:Instanding,runningandjumpingcondition. 5. Throw-in:Standingthrow-inandRunningthrow-in. 6. Feinting:Withthelowerlimbandupperpartofthefoot. 7. Tackling:SimpleTackling,SlideTackling. 8. GoalKeeping:CollectionofBall,Ballclearance-kicking,throwinganddeflecting. 9. GamepracticewithapplicationofRulesandRegulations. B. Rulesandtheirinterpretationanddutiesofofficials.	

	BASKETBALL	<p>A. FundamentalSkills</p> <ol style="list-style-type: none"> 1. Passing:TwohandChestPass, TwohandsBounce Pass,OnehandBaseballPass,SidearmPass,Overhead Pass,HookPass. 2. Receiving:Twohandreceiving,Onehandreceiving, Receivinginstationaryposition,Receivingwhile JumpingandReceivingwhileRunning. 3. Dribbling:Howtostartdribble,dropdribble,High Dribble,LowDribble,ReverseDribble,Rolling Dribble. 4. Shooting:Lay-upshot anditsvariations,One hand Setshot,Two handsjumpshot,Hookshot,FreeThrow. 5. Rebounding:DefensivereboundandOffensiverebound. 6. IndividualDefence:Guardingtheplayerwiththeball andwithouttheball,Pivoting. 7. Gamepracticewith applicationofRulesandRegulations. <p>B. Rulesandtheirinterpretation and dutiesofofficials</p>	
	NETBALL	<p>A. Fundamentalskills</p> <ol style="list-style-type: none"> 1. Catching: onehanded,twohanded,with feetgroundedand inflight. 2. Throwing (Different passes and their uses): One hand passes (shoulder,highshoulder,underarm,bounce,lob), twohandpasses(Push,overheadandbounce). 3. Footwork:Landingononefoot,landingontwo feet,Pivot,Runningp ass. 4. Shooting:Onehand,forwardstepshot,andbackwardstepshot. 5. Techniquesof freedodgeandsprint,suddensprint, sprintandstop,sprintingwithchangeatspeed. 6. Defending:Markingtheplayer,markingtheball, blocking,insidethecircle,outsidethecircle. thecircleedgeagainstthepassing. 7. Intercepting:Passandshot. 8. Gamepracticewith applicationofRulesandRegulations. <p>B. Rulesandtheirinterpretation and dutiesofofficials</p>	

5 th Sem	<u>Athletics Track-</u> <u>Relays</u> <u>Jumps- Triple</u> <u>Jump Throws-</u> <u>Javelin Throw</u>	Relay Race: Starting, Baton Holding/Carrying, Baton Exchange in between zone, and Finishing Triple Jump: Approach Run, Take-off, Flight in the Hop, Step, Jump and Landing Javelin Throw: Grip, Carry, and Recovery (3/5 Impulse stride). Release	Total 26hrs 2hrs/week
	Athletics Combined Events- Heptathlon & Decathlon Jumps- Pole Vault Throws- Hammer Throw	Combined Events: Heptathlon all the 7 events Decathlon: All 10 Events Pole Vault: Approach Run, Planting the Pole, Take-off, Bar Clearance and Landing. Hammer Throw: Holding the Hammer, Initial Stance Primary Swing, Turn, Release and Recovery (Rotation in the circle).	
	HOCKEY	A. Fundamental Skills 1. Passing: Short pass, Long pass, push pass, hit 2. Trapping. 3. Dribbling and Dozing. 4. Penalty stroke practice. 5. Penalty corner practice. 6. Tackling: Simple Tackling, Slide Tackling. 7. Goal Keeping, Ball clearance-kicking, and deflecting. 8. Game practice with application of Rules and Regulations. B. Rules and their interpretation and duties of officials.	
	CRICKET	A. Fundamental Skills 1. Batting- Forward Defense Stroke, Backward Defense Stroke, Off Drive, On Drive, Straight Drive, Cover Drive, Square Cut. 2. Bowling- Out-swing, In-swing, Off Break, Leg Break and Googly. 3. Fielding: Catching - The High Catch, The Skim Catch, The Close Catch and throwing at the stumps from different angles. Long Barrier and Throw, Short Throw, Long Throw, Throwing on the Turn. 4. Wicket Keeping B. Rules and their interpretation and duties of officials	
BASEBALL	A. Fundamental Skills Player Stances – walking, extending walking, L stance, cat stance Grip – standard grip, choke grip Batting – swing and bunt. Pitching Baseball: slider, fast pitch, curve ball, drop ball, rise ball, change up, knuckle ball, screw ball, Rules and their interpretation and duties of officials.		

6 th Sem	Individual Games	<p>A. Fundamentals skills</p> <ol style="list-style-type: none"> 1. Basic Knowledge: Various parts of the Racket and Grip. 2. Service: Short service, Long service, Long-high service. 3. Shots: Overhead shot, Defensive clear shot, Attacking clear shot, Drop shot, Net shot, Smash. 4. Game practice with application of Rules and Regulations. <p>B. Rules and their interpretations and duties of the officials.</p>	Total 26 hrs 2 hrs/week
	SHUTTLE BADMINTON	<p>A. Fundamentals skills</p> <ol style="list-style-type: none"> 1. Basic Knowledge: Various parts of the Racket and Grip (Shake Hand & Pen Hold Grip). 2. Stance: Alternate & Parallel. 3. Push and Service: Backhand & Forehand. 4. Chop: Backhand & Forehand. 5. Receive: Push and Chop with both Backhand & Forehand. 6. Game practice with application of Rules and Regulations. <p>Rules and their interpretations and duties of the Officials</p>	
	TABLE TENNIS	<p>A. Fundamentals Skills</p> <ol style="list-style-type: none"> 1. Catching, Throwing and Ball control. 2. Goal Throws: Jump shot, Center shot, Dive shot, Reverse shot. 3. Dribbling: High and low. 4. Attack and counter attack, simple counter attack, counter attack from two wings and center. 5. Blocking, Goal Keeping and Defensive skills. 6. Game practice with application of Rules and Regulations. <p>B. Rules and their interpretation and duties of officials</p>	
	HANDBALL	<p>A. Fundamentals skills</p> <ol style="list-style-type: none"> 1. Basic Knowledge: Various parts of the Racket and Grip. 2. Service: Short service, Long service, Long-high service. 3. Shots: Overhead shot, Defensive clear shot, Attacking clear shot, Drop shot, Net shot, Smash. 4. Game practice with application of Rules and Regulations. <p>B. Rules and their interpretation and duties of officials</p>	
	BALL BADMINTON	<p>A. Fundamentals skills</p> <ol style="list-style-type: none"> 1. Basic Knowledge: Various parts of the Racket and Grip. 2. Service: Short service, Long service, Long-high service. 3. Shots: Overhead shot, Defensive clear shot, Attacking clear shot, Drop shot, Net shot, Smash. 4. Game practice with application of Rules and Regulations. <p>B. Rules and their interpretation and duties of officials</p>	

Scheme of Assessment:

WEIGHTAGE	100%	(100%)
	CIE	CIE
At the End of 3 rd Semester	20	25
At the End of 4 th Semester	20	25
At the End of 5 th Semester	20	25
At the End of 6 th Semester	20	25
Written assignment/Quiz/Report writing/	20	-
TOTAL MARKS FOR THE COURSE	100	100

Course Code:	UHS600C	INDIAN KNOWLEDGE SYSTEMS	Credits:	1
Hours/Week (L:T:P: S):	15		CIE	: 50 Marks
Total Hours of Pedagogy (Theory) 25			SEE	: 50 Marks
Course Learning Objectives: The students will be able to				
1	To facilitate the students with the concepts of Indian traditional knowledge and to make them understand the Importance of roots of knowledge system.			
2	To make the students understand the traditional knowledge and analyse it and apply it to their day-to-day life.			

Module-I	05 Hrs
Introduction to Indian Knowledge Systems (IKS): Overview, Vedic Corpus, Philosophy, Character scope and importance, traditional knowledge vis-a-vis indigenous knowledge, traditional knowledge vs. western knowledge.	
Module - II	05 Hrs
Traditional Knowledge in Humanities and Sciences: Linguistics, Number and measurements- Mathematics, Chemistry, Physics, Art, Astronomy, Astrology, Crafts and Trade in India and Engineering and Technology.	
Module -III	05 Hrs
Traditional Knowledge in Professional domain: Town planning and architecture- Construction, Health, wellness and Psychology-Medicine, Agriculture, Governance and public administration, United Nations Sustainable development goals.	

Course Outcomes: After completing the course, the students will be able to	
CO1:	Provide an overview of the concept of the Indian Knowledge System and its importance.
CO2:	Appreciate the need and importance of protecting traditional knowledge.
CO3:	Recognize the relevance of Traditional knowledge in different domains.
CO4:	Establish the significance of Indian Knowledge systems in the contemporary world.

Reference Books:	
1	Introduction to Indian Knowledge System- concepts and applications , B Mahadevan, Vinayak Rajat Bhat, Nagendra Pavana R N, 2022, PHI Learning Private Ltd, ISBN-978-93-91818-21-0
	Traditional Knowledge System in India , Amit Jha, 2009, Atlantic Publishers and Distributors (P) Ltd., ISBN-13: 978-8126912230,
2	Knowledge Traditions and Practices of India , Kapil Kapoor, Avadesh Kumar Singh, Vol. 1, 2005, DK Print World (P) Ltd., ISBN 81-246-0334,
Suggested Web Links:	
1.	https://www.youtube.com/watch?v=LZP1StpYEPM
2.	http://nptel.ac.in/courses/121106003/
3.	http://www.iitkgp.ac.in/department/KS;jsessionid=C5042785F727F6EB46CBF432D7683B63 (Centre of Excellence for Indian Knowledge System, IIT Kharagpur)
4.	https://www.wipo.int/pressroom/en/briefs/tk_ip.html
5.	https://unctad.org/system/files/official-document/ditcted10_en.pdf
6.	http://nbaindia.org/uploaded/docs/traditionalknowledge_190707.pdf
7.	https://unfoundation.org/what-we-do/issues/sustainable-development-goals/?gclid=EAIAIQobChMInp-Jtb_p8gIVTeN3Ch27LAmPEAAYASAAEgIm1vD_BwE

ASSESSMENT AND EVALUATION PATTERN		
WEIGHTAGE	50% (CIE)	50%(SEE)
QUIZZES		
Quiz-I	Each quiz is evaluated for 05 marks adding up to 10 Marks.	*****
Quiz-II		
THEORY COURSE - (Bloom's Taxonomy Levels: Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating)		
Test - I	Each test will be conducted for 25 Marks adding upto 50 marks. Final test marks will be reduced to 20 Marks	*****
Test - II		
EXPERIENTIAL LEARNING	20	*****
Case Study-based Teaching-Learning	--	*****
Sector wise study & consolidation (viz., Engg. Semiconductor Design, Healthcare & Pharmaceutical, FMCG, Automobile, Aerospace and IT/ ITeS)	--	
Video based seminar (4-5 minutes per student)	--	
Maximum Marks for the Theory	---	50 Marks
Practical	--	--
Total Marks for the Course	50	50

CO-PO Mapping												
CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	-	-	-	-	-	-	3	-	-	-	1
CO2	-	-	-	-	-	2	-	-	-	-	-	-
CO3	-	-	2	2	-	-	-	-	-	-	-	-
CO4	-	-	-	-	-	3	2	-	-	-	-	-

High-3 : Medium-2 : Low-1

Course Code: UHS753C / UHS731N	RESEARCH METHODOLOGY & Intellectual Property Rights	Credits	3
Hours/Week (L:T:P: S): 2:2:0:0		CIE Marks	50
Total Hours of Pedagogy (Theory) 25		SEE Marks	50
Course Objectives: CO1. To Understand the knowledge on basics of research and its types. CO2. To Learn the concept of Literature Review, Technical Reading, Attributions and Citations. CO3. To learn Ethics in Engineering Research. CO4. To Discuss the concepts of Intellectual Property Rights in engineering.			
Teaching-Learning Process (General Instructions) These are sample Strategies; that teachers can use to accelerate the attainment of the various course outcomes. <ol style="list-style-type: none"> Lecturer methods (L) need not be only the traditional lecture methods, but alternative effective teaching methods could be adopted to attain the outcomes. Use of Video to explain various concepts on IPR. Encourage collaborative (Group Learning) Learning in the class. Ask at least three HOT (Higher Order Thinking) questions in the class, which promotes critical thinking. Introduce Topics in manifold representations. Show the different ways to analyze the research problem and encourage the students to come up with their own creative ways to solve them. Discuss how every concept can be applied to the real world - and when that's possible, it helps Improve the students' understanding. 			
Module-1			(5 Hours)
Introduction: Meaning of Research, Objectives of Engineering Research, and Motivation in Engineering Research, Types of Engineering Research, Finding and Solving a Worthwhile Problem. Ethics in Engineering Research, Ethics in Engineering Research Practice, Types of Research Misconduct, Ethical Issues Related to Authorship.			
Teaching- Learning Process	Chalk and talk method / PowerPoint Presentation.		
Module-2			(5 Hours)
Literature Review and Technical Reading, New and Existing Knowledge, Analysis and Synthesis of Prior Art Bibliographic Databases, Web of Science, Google and Google Scholar, Effective Search: The Way Forward Introduction to Technical Reading Conceptualizing Research, Critical and Creative Reading, Taking Notes While Reading, Reading Mathematics and Algorithms, Reading a Datasheet. Attributions and Citations: Giving Credit Wherever Due, Citations: Functions and Attributes, Impact of Title and Keywords on Citations, Knowledge Flow through Citation, Citing Datasets, Styles for Citations, Acknowledgments and Attributions, What Should Be Acknowledged, Acknowledgments in, Books Dissertations, Dedication or Acknowledgments.			
Teaching-Learning Process	Chalk and talk method / PowerPoint Presentation		
Module-3			(5 Hours)
Introduction To Intellectual Property: Role of IP in the Economic and Cultural Development of the Society, IP Governance, IP as a Global Indicator of Innovation, Origin of IP History of IP in India. Major Amendments in IP Laws and Acts in India. Patents: Conditions for Obtaining a Patent Protection, To Patent or Not to Patent an Invention. Rights Associated with Patents. Enforcement of Patent Rights. Inventions Eligible for Patenting. Non-Patentable Matters. Patent Infringements. Avoid Public Disclosure of an Invention before Patenting. Process of Patenting. Process of Patenting. Prior Art Search. Choice of Application to be Filed. Patent Application Forms. Jurisdiction of Filing Patent Application. Publication. Pre-grant Opposition. Examination. Grant of a Patent. Validity of Patent Protection. Post-grant Opposition. Commercialization of a Patent. Need for a Patent Attorney/Agent. Can a Worldwide Patent be Obtained? Do I Need First to File a Patent in India? Patent Related Forms. Fee Structure. Types of Patent Applications. Commonly Used Terms in Patenting. National Bodies Dealing with Patent Affairs. Utility Models.			
Teaching- Learning Process	Chalk and talk method / PowerPoint Presentation.		
Module-4			(5 Hours)
Copyrights and Related Rights: Classes of Copyrights. Criteria for Copyright. Ownership of Copyright. Copyrights of the Author. Copyright Infringements. Copyright Infringement is a Criminal Offence. Copyright Infringement is a Cognizable Offence. Fair Use Doctrine. Copyrights and Internet. Non-Copyright Work. Copyright Registration. Judicial Powers of the Registrar of Copyrights. Fee Structure. Copyright Symbol.			

<p>Validity of Copyright. Copyright Profile of India. Copyright and the word 'Publish'. Transfer of Copyrights to a Publisher. Copyrights and the Word 'Adaptation'. Copyrights and the Word 'Indian Work'. Joint Authorship. Copyright Society. Copyright Board. Copyright Enforcement Advisory Council (CEAC). International Copyright Agreements, Conventions and Treaties. Interesting Copyrights Cases.</p> <p>Trademarks: Eligibility Criteria. Who Can Apply for a Trademark. Acts and Laws. Designation of Trademark Symbols. Classification of Trademarks. Registration of a Trademark is Not Compulsory. Validity of Trademark. Types of Trademark Registered in India. Trademark Registry. Process for Trademarks Registration. Prior Art Search. Famous Case Law: Coca-Cola Company vs. Bisleri International Pvt. Ltd.</p>	
Module-5	
(5Hours)	
<p>Industrial Designs: Eligibility Criteria. Acts and Laws to Govern Industrial Designs. Design Rights. Enforcement of Design Rights. Non-Protectable Industrial Designs India. Protection Term. Procedure for Registration of Industrial Designs. Prior Art Search. Application for Registration. Duration of the Registration of a Design. Importance of Design Registration. Cancellation of the Registered Design. Application Forms. Classification of Industrial Designs. Designs Registration Trend in India. International Treaties. Famous Case Law: Apple Inc. vs. Samsung Electronics Co.</p> <p>Geographical Indications: Acts, Laws and Rules Pertaining to GI. Ownership of GI. Rights Granted to the Holders. Registered GI in India. Identification of Registered GI. Classes of GI. Non-Registerable GI. Protection of GI. Collective or Certification Marks. Enforcement of GI Rights. Procedure for GI Registration Documents Required for GI Registration. GI Ecosystem in India.</p> <p>Case Studies on Patents. Case study of Curcuma (Turmeric) Patent, Case study of Neem Patent, Case study of Basmati patent. IP Organizations In India. Schemes and Programmes</p>	
Teaching- Learning Process	Chalk and talk method / PowerPoint Presentation
<p>Assessment Details (both CIE and SEE)</p> <p>The weight age of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 40% of the maximum marks (20 marks out of 50). A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course if the student secures not less than 35% (18 Marks out of 50) in the semester-end examination (SEE), and a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.</p> <p>Continuous Internal Evaluation:</p> <p>Three Unit Tests each of 20 Marks (duration 01 hour)</p> <ol style="list-style-type: none"> 1. First test at the end of 5th week of the semester 2. Second test at the end of the 10th week of the semester 3. Third test at the end of the 15th week of the semester <p>Two assignments each of 10 Marks</p> <ol style="list-style-type: none"> 4. First assignment at the end of 4th week of the semester 5. Second assignment at the end of 9th week of the semester <p>Group discussion/Seminar/quiz any one of three suitably planned to attain the COs and POs for 20 Marks (duration 01 hours)</p> <ol style="list-style-type: none"> 6. At the end of the 13th week of the semester <p>The sum of three tests, two assignments, and quiz/seminar/group discussion will be out of 100 marks and will be scaled down to 50 marks (to have less stressed CIE, the portion of the syllabus should not be common /repeated for any of the methods of the CIE. Each method of CIE should have a different syllabus portion of the course).</p> <p>CIE methods /question paper is designed to attain the different levels of Bloom's taxonomy as per the Outcome defined for the course.</p> <p>Semester End Examination:</p> <p>Theory SEE will be conducted by the University as per the scheduled timetable, with common question papers for the subject (duration 03 hours)</p> <ol style="list-style-type: none"> 1. The question paper will be set for 100 marks. Marks scored shall be proportionally reduced to 50 marks. 2. The question paper will have ten questions. Each question is set for 20 marks. 3. There will be 2 questions from each module. Each of the two questions is under a module (with a maximum of 2 sub-questions). 4. The students have to answer 5 full questions, selecting one full question from each module. 	
<p>Course Outcomes (Course Skill Set)</p> <p>At the end of the course, the student will be able to:</p> <ol style="list-style-type: none"> CO 1. To know the meaning of engineering research. CO2. To know the procedure of the literature Review and Technical Reading CO3. To understand the fundamentals of the patent laws and drafting procedure. CO 4. Understanding the copyright laws and subject matters of copyrights and designs. CO5. Understanding the basic principles of design rights. 	

Suggested Learning Resources:**Textbook**

1. Dr. Santosh M Nejakar, Dr. Harish Bendigeri "Research Methodology and Intellectual Property Rights", ISBN 978-93-5987-928-4, Edition: 2023-24.

Reference Book:

1. David V. Thiel "Research Methods for Engineers" Cambridge University Press, 978-1-107-03488-4
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2. Intellectual Property Rights by N.K.Acharya Asia Law House 6th Edition. ISBN: 978-93-81849-30-9

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning

- Quizzes
- Assignments
- Seminars