

Infrastructure Facility of Civil Engineering Dept.

Sl. No.	Equipment	Brief Specification	Quantity
1	Electromechanical servo-actuated automatic ring shear machine.	Used to evaluate the residual shear strength of soils for different shear rates.	1
2	Electromechanical Servo-actuation, automatic oedometer machine.	Used to measure Consolidation characteristics of the given soil	1
3	Servo hydraulic Actuator (500 kN)	Load-controlled mode to simulate various structural loading environment	1
4	Servo compression testing machine (3000 kN)	Determines compression strength	1
5	Servo hydraulic flexure teasing machine (500 kN)	Determines flexural strength	1
6	Universal testing machine (500 kN)	Determines tensile strength	1
7	Steam curing tank	Concrete Curing	1
8	Non-destructive testing machines (NDT)	Determines the character of concrete without damaging the component	1
9	Data acquisition system		1
10	Rapid chloride penetration test (RCPT)	Used to evaluate the resistance of a concrete sample to the penetration of chloride ions.	1
11	TOC analyzer	Measures the amount of total organic carbon present in a liquid or water sample	1
12	BOD incubator and COD Package	Used for determination of biochemical oxygen demand	1
13	Solar 929 Automic Absorption	Analyse compounds in water.	1
14	Spectrophotometer UV/VIS Scanning spectrometer	Determination of different analytes	1
15	Gas chromatograph	Used in separating and analysing the compounds that can be vaporized without decomposition	1

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16	Kjeldhal Apparatus IWW-ECO Single Pan	Organic nitrogen and protein contents in chemical substance	1
17	Thermo electron portable multimeter kit MICLINS Peristaltic Pumps 5	To check the physical properties of liquid samples	1
18	Soil moisture meter: Data logger, Temperature sensors	Measurement of moisture in soil, without any programming or extensive user setup.	1
19	Muffle furnace, Vertical freezer	Heating and cooling apparatus	1
20	Cyclic and Static Tri-axial testing apparatus	Determines the strength of soil	1
21	Pile load test setup	Determine ultimate bearing capacity.	1
22	Direct shear test	Determines shear strength of soil	1
23	Plate load test assembly	Determines bearing capacity and settlement,	1
24	Total stations (04)	Surveying	1
25	GPS Handset, Electronics Distance Meter	Surveying	1
26	Auto level, Theodolite planimeter	Levelling and angle determination	1
27	Shake Table (Hzl with eccentric com)	Compaction Test	1
28	Shake Table (Vtl. Base motion)	Compaction Test	1
29	Combined unit Venturi and Orifice Apparatus	Determines the discharge of a stream	1
30	Closed circuit combined unit for orifice and mouthpiece apparatus	Determines the discharge of a stream	1
31	Closed circuit minor loss apparatus	Determines the losses in the discharge of water	1
32	Closed circuit pipe friction apparatus	Determines the loss in discharge due to friction	1
33	Closed circuit V-notch apparatus	Discharge calculation	1
34	Impact of jet on vanes	Determines Turbine capacity	1

Sl. No.	Equipment	Brief Specification	Quantity
35	Meander River Model	Simulate both equilibrium river bed topography and planimetric changes.	1

II. Software Available

Sl. No.	Software	Version	Type System/ Application
1	ETABS	2016	Modelling and Designing a structure
2	SAP2000	2016	Modelling and Designing a structure
3	STAAD.Pro	V8i	Modelling and Designing a structure
4	AutoCAD	2007	Drawings
5	ARC GIS and INFO	10	GIS Mapping
6	ENV Network	2.0	Image processing