

Adequate and well equipped laboratories and technical manpower

Table 5.7.3.1.1

Sr. No.	Name of the Laboratory	Name of the Important equipment	Technical Manpower support		
			Name of the technical staff	Designation	Qualification
1.	Concrete Technology & Transportation Engg. Lab	1. Automatic Compression Testing Machine: Windows Based, Capacity 3000kN. 2. Cement Auto Clave: Analog with pressure gauge & digital temperature controller. 3. Los Angeles Abrasion Testing Machine with Counter 4. Laboratory California Bearing Ratio Test Apparatus: Motorized, 3 Speed with mild steel mould. 5. Concrete Mixer Pan Type: Capacity 40L 6. Vibration Machine with built in digital timer NABL Calibrated 7. Digital Marshall Apparatus: 50KN Single speed new model for 4" dia sample inclusive of 3 moulds. 8. Universal Penetrometer with Timer 9. Ductility Testing Machine with digital temperature indicator 10. Concrete Permeability Apparatus: 3 Cell model 150mm cube 11. Compaction Factor Apparatus 12. AIMIL Consistometer 13. Flexure Test Attachment Apparatus: 100KN capacity with Software. 14. Electronic Weighing Balance: DS-852 Capacity 30Kg. 15. Vibrating Table: 75X75cm for 6 moulds of 150mm cube	Mr. Sreevatsa	Instructor	Diploma

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2.	Geotechnical Engg. Lab	<ol style="list-style-type: none"> 1. Direct Shear Apparatus: Motorized 12 Speed Supplied complete with proving ring & 2nos of dial gauge of 0.01X25mm with Electric Kit HS 25.515.1 2. Unconfined Compression Test Apparatus: HS 22.15 (Motorized Supplied complete with proving ring dial gauge). 3. Universal Combination Permeability meter 4. Electronic Balance 100Kg Capacity 10gm reliability, Platform Size 450X550mm 5. HOS Lab Electric Oven with Digital Indicator 450X450X450mm 6. Coarse Sieve Shaker & Fine Sieve Shaker: Motorized 7. Liquid Limit Cone Penetrometer: Automatic digital new model 8. Electronic Triaxial Test Apparatus: Load frame motorized 50KN <ul style="list-style-type: none"> • Triaxial Cell Compensating Pressure Apparatus (Oil & Water Type) • Pressure gauge 50-1000 KPa • HS 28.585 • Electronic kit for triaxial test instrument consisting of 3 channel digital indicator 10KN. 9. Bench Type Consolidometer 10. Hydraulic Extruder: Sample eject 5000 Hydraulic Sample Extruder Electrical cum Hand operator 	Mr. Kantharaju M J	Instructor	Diploma
3.	Materials testing Lab	<ol style="list-style-type: none"> 1. Sieve Shaker Motorized with built in digital timer 2. Sieves GI frame of 30cm dia 3. Electric Weighing Balance 4. AIM -046 Pycnometer 5. Electric Oven with digital indicator 6. Density Basket measure 20 liters with steel tamping rod 16mm dia, 600mm length. 7. UTM 600 kN 8. Impact Testing Machine 32 Joules 9. Torsion Testing Machine 10 Kg-m 10. Hardness Testing Machine: Indentation Hardness 	Mrs. Roopavathi V	Assistant Foreman	Diploma (B.E)

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4.	Survey Practice Lab	<ol style="list-style-type: none"> 1. Pentax Total Station: Model W825NX <ul style="list-style-type: none"> • Two batteries • One charger • One wooden stand • Instruction manual CD containing software 2. LYNX Digital Planimeter 3. Vernier Theodolite: Model SVT supplied least count 20 sec with aluminum stand 4. Dumpy Level: Model DL-9 supplied with aluminum stand 5. Auto Level: Model LAL-6 supplied with aluminum stand 6. LYNX Prismatic Compass: 4" dia 7. LYNX Surveyor's Compass with stand 8. LYNX Ceylon Ghat Tracer 9. LYNX Pantagraph 10. LYNX Plane Table with Accessories 	Mr. Kantharaju M J	Instructor	Diploma
5	Environmental Engg. Lab	<ol style="list-style-type: none"> 1. PC Based UV-VAS Spectro Photometer 2. Water Analyzer Kit (Colorimeter, D.O, Cond, TDS, PH Salinity, Temperature) 3. Controller Based Flame Photometer with Compressor 4. Digital Conductivity – TDS Meter with cells 5. Digital Nephelo/ Turbiditymeter 6. Digital pH meter with Electrode (LCD Display) 7. Digital Calorimeter 8. Digital Electronic Balance 220gm, Cap & 0.001 gacre 9. BOD Incubator: 6.1 cubic feet with voltage stabilizer for indicator, volume 175 lit. 10. Hand hold Digital Colony Counter with 6 digit LCD buzzer & markerpen 11. Mini Rotary Shaker with 0-15min timer & speed regulator max 180rpm (Remy) 12. Magnus Inclined Binocular Microscope 13. Centrifuge with digital speed indicator, Safety lid lock & accessories. 14. Refrigerator Double Door Capacity LG make 240 lit 15. Double Water Distillation Unit 16. Muffle Furnace: 150X150X230mm 3.3Kw with digital 	Mrs. Roopavathi V	Assistant Foreman	Diploma (B.E)

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		temperature control & thermal fuse 17. Hot Air Oven: Size 18”X18”X18” no of chambers 2nos digital temperature controller cum indicator double wall inside chamber made of stainless steel.			
6	Engg. Geology Lab	1. Mineral Specimens 2. Rock Specimens 3. Hardness (Pen Knives) 4. Fracture & Cleavage Sets 5. Streak Plates 6. Models for Engg & Mining geology 7. Models for different forms of Igneous Rock bodies 8. Dip, Strike, Pitch & Escarpment Models 9. Models of Fold & Fault	Mr. Kantharaju M J	Instructor	Diploma
7	Computer Aided Building Planning & Detailing Lab	1. Lenovo Think Centre E30: Work Stations with Power cord • Monitor: 19” Inch Wide Monitor • CPW’s • Power Cables • LAN Patch Cards 2. Lenovo Think Centre M81 Model • CPUs • Power Cables • USB standard Keyboard & Optical Mouse, • 17 inch TFT Square Monitor. • LAN Patch Cards • 1GB Graphic Cards 3. Stadd-Pro Software (Licensed) 4. Auto Plotter Software (Licensed - 10) 5. Auto CAD - 2013 Software (Licensed) 6. Auto CAD - 2010 Software (Freeware) 7. HP 1566 Printer	Mrs. Roopavathi V	Assistant Foreman	Diploma (B.E)
8	Fluid mechanics lab	1. Pipe Friction Apparatus (major losses in pipes apparatus) 2. Impact of jet on vanes 3. Orifice and Venturimeter (combined set up). 4. Flow measuring devices like Nozzle and Rota meter Apparatus 5. Flow measuring devices like V or rectangular notches	Mr. Kantharaju M J	Instructor	Diploma

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		apparatus. 6. Multi stage centrifugal pump test rig (2HP) 7. Pelton turbine test Rig with mechanical loading 8. Kaplan turbine test Rig with mechanical loading 9. Francis turbine test Rig with mechanical loading 10. Single Stage Centrifugal Pump Test Rig 11. Bernoulli Apparatus 12. Vertical Apparatus Orifice with Calibration of vertical tank 13. Calibration of pressure gauge 14. Calibration of ogee weir board crested weir and venturi flume with SS tank			
9	Structural Engg. Lab	1. Silver schmidt PCN 2. Pundit lab + ultrasonic testing instrument 3. Profometer PM-630 4. Shake table type 1 model isi-1 5. Shake table type 3 model isi-3 6. Ieicos signal conditioning amplifier 7. Ieicos accelerometer model acc04 8. USB based data acquisition system with software isies 16 bit resolution 9. Ieicos four storey building frame 10. Loading frame with facilities for x and y axes 11. Hydraulic system	Mr. Sreevatsa	Instructor	Diploma

*NOTE: 1. Laboratories were used for Project, research & Consultancy work.

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Major Equipment sample photos



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