

Name of the Institution: GCE Dharmapuri

1. **Name of the Discipline / Branch :** Civil Engineering

Name of the Laboratory: 1. Fluid Mechanics and Machinery Laboratory

List of Equipments available:

SL.NO	NAME OF THE EQUIPMENT	QUANTITY
1	PELTON WHEEL TURBINE TEST RIG	1
2	FRANCIS TURBINE	1
3	PUMP&PIPING SYSTEM FOR FRANCIS TURBINE	1
4	KAPLANTURBINE	1
5	PUMP&PIPING SYSTEM FOR KAPLANTURBINE	1
6	PIPE FRICTION (MAJAR LOSSES APPARATUS	1
7	RECIPROCATING PUMP TEST RIG	1
8	GEAR OIL PUMP TEST RIG	1
9	CLOSED CIRCUIT VENTURI METER TEST	1
10	CLOSED CIRCUIT ORIFICE METER TEST	1
11	SINGLE STAGE CENTRIFUGAL PUMP SET	1
12	MULTI STAGE CENTRIFUGAL PUMP SET	1
13	CLOSED CIRCUIT META CENTRIC HEIGHT APPARATUS	1
14	PIPE FRICTION (MINOR LOSSES APPARATUS)	1
15	CLOSED CIRCUIT BERNOULLIS THEOREM APPARATUS	1
16	CLOSED CIRCUIT RECTANGULAR NOTCH TANK APPARATUS	1
17	SUBMERSIBLE PUMP & PITOT TEST APPARATUS	1

Name of the Laboratory: 2. Strength of Materials Laboratory

List of Equipments available:

SL.NO	NAME OF THE EQUIPMENT	QUANTITY
1	COMBINED IMPACT TESTING MACHINE	1
2	ROCKWELL HARDNESS	1
3	BRINELL HARDNESS MACHINE	1
4	LATERAL EXTENSOMETER	1
5	LONGITUDINAL COMPRESSOMETER ANALOG	1
6	LE - CHATELIER MOULD APPARATUS	5
7	BEEH DEFLECTION APPARATUS	1
8	DIAL GAUGES 0.01×25MM BAKER	5
9	SIEVES 4.75mm,2.36mm,1.18mm,600μ,300μ,425μ,150μ	2 SETS EACH 7
10	75 MICRON SIEVE	2
11	LID AND PAN	2
12	COMPACTION FACTOR APPARATUS & TAMPPING ROD 60 MM DIA *60CM L	1
13	THICKNESS GAUGE	3
14	LENGTH GAUGE	3
15	DIGITAL MOTORISED SPRING TESTING MACHINE	1
16	ANALOGUE COMPRESSION TESTING MACHINE 2007	1
17	CRUSHING APPARATUS	1
18	LOAD CELL (CAPACITY 50 KG)	1
19	WEIGHING PLATFORM WITH STAND	1

20	SIEVE SET 8" DIA BRASS FINE SIEVES (90 MICRON)	2
21	PROJECTOR and PRINTER	3 &1
22	PC BASED ULTRASONIC (PULSE VELOCITY TESTER)(INCLUDING GST)	1
23	JOLTING APPARATUS ,REBAR DETECTOR & COVER METER (INCLUDING GST)	1&1
24	SEHMIDT REBOUND HAMMER & FLEXURAL TESTING MACHINE (INCLUDING GST)	1&1
25	UNIVERSAL TESTING MACHINE 1000 KN (INCLUDING GST)	1
26	COMPRESSION TESTING MACHINE 3000kN (INCLUDING GST)	1
27	LEAF SPRING TESTING MACHINE (INCLUDING GST)	1
28	3 CELL APCT APPARATUS, HUMIDITY CHAMBER, CONSTANT TEMPERATURE WATER BATH (INCLUDING GST)	1
29	COMPUTERISED LOADING FRAME 1000kN	1
30	REBOUND HAMMER ANALOG (INCLUDING GST)	1

Name of the Laboratory: 3. Concrete and Highway Laboratory

List of Equipments available:

SL.NO	NAME OF THE EQUIPMENT/APPARATUS/INSTRUMENTS/DEVICES/ETC	QUANTITY
1	AGGREGATE IMPACT TEST APPARATUS	1
2	LOS ANGELIS ABRASION TESTING MACHINE	1
3	GAUGING TROWEL	10
4	PLANERS	10
5	UNIVERSAL PENETIOMETER	1
6	TAR VISCOMETER	1
7	VICAT'S APPARATUS	5

8	MORTAR CUBE MOULD WITH BASE PLATE	12
9	SLUMP CONE TEST APPARATUS	3 SETS
10	CONCRETE CUBE MOULD WITH BASE PLATE	12
11	CYLINDER MOULD	12
12	SET OF SIEVES 63,40,20,80,12.5,10,6.3&4.75 L10+PAN	2
13	LID & PAN	2
14	FLOW TABLE MOTORISED	1
15	AIR PERMEABILITY APPARATUS	1
16	SOFTENING POINT (RING AND BALL APPARATUS)	1
17	RAPID CHLORIDE PENETRATION TEST	1
18	ACCELERATED CURING TANK,DIGITAL WEIGHING BALANCES (100KG,20KG,2KG) AUTOMATED BLAINS APPARATUS	EACH 1
19	LAB SIEVE SETS,SIEVE SHAKER.SHRINKAGE BAR MOULD,LENGTH COMPAROMETER AND 50MM MOULDS	
20	DIGITAL MARSHALL APPARATUS AND DUCTILITY TESTING MACHINE	1,1
21	BITUMEN BINDER EXTRACTOR ,SKID RESISTANCE TESTER,BUOYANCY BALANCE,FLASH AND FIRE POINT TEST	EACH 1
22	CONCRETE MIXER,MORTAR MIXER,VIBRATING TABLE AND VIBRATING MACHINE	EACH 1
23	BALL MILL LB TYPE 10KG, JAW CHRUSHER,PULVERISER	EACH 1

24	V FUNNEL TEST, L BOX APPARATUS, MARSH CONE FUNNEL, J RING TEST APPARATUS, CONCRETE WATER PERMEABILITY TEST APPARATUS, VEE BEE CONSISTOMETER	EACH 1
25	DYNAMIC ACID ATTACK TEST APPARATUS, PROJECTILE IMPACT TESTING DEVICE	EACH 1
26	CEMENT AUTOCLAVE, CONCRETE PENETROMETER: SPRING TYPE, COMPRESSION FRAME JIG ASSEMBLY & FLEXURAL JIG ASSEMBLY, FLEXURAL PRISM MOULD	EACH 1
27	CONCRETE SURFACE RESISTIVITY METER	1
28	CARBONATION CHAMBER	1
29	CAST IRON CONCRETE CUBE MOULD 100mm x 100mm x 100mm, CAST IRON CONCRETE CYLINDER MOULD 100mm X 200mm , MILD STEEL MOULD FOR 70.6 mm CUBE	18+18+25

Name of the Laboratory: 4. Surveying Laboratory

List of Equipments available:

SL.NO	NAME OF THE EQUIPMENT	QUANTITY
1	CHAIN 30M	10
2	ARROWS	100
3	MEASURING TAPE (metallic & plastic) 30M, 50M	6+6=12
4	RANGING ROD - 3m,2m	15+15= 30
5	OPEN CROSS STAFF	10

6	PLUMB BOB	10
7	PLANE TABLE WITH TRIPAD STAND	10
8	POCKET STEREOSCOPE	5
9	DUMPY LEVEL WITH TRIPAD	10
10	LEVELLING STAFF - 4m,3m,6m	6+6+3=15
11	PRISMATIC COMPASS WITH TRIPAD	12
12	SURVEYORIS COMPASS WITH TRIPAD	2
13	BOX SEXTANT	2
14	POLAR PLANIMETER ANCHOR AND TRACING ARMS	3
15	VERNIER TRANSIT THEODOLITE WITH TRIPAD	10
16	DIGITAL THEODOLITE (MAKE - GEO MAX) ZIPP02	2
17	MAGELLAN EXPLORIST 610 HANDHELD GPS	2
18	LASER DISTANCE METER	2
19	TOTAL STATION-TSO2 PLUS	1
20	DIGITAL THEODOLITE	3
21	TOTAL STATION	2
22	GPS	1

Name of the Laboratory: 5. Engineering Practice Laboratory

List of Equipments available:

SL.NO	NAME OF THE EQUIPMENT/APPARATUS/INSTRUMENTS/DEVICES/ETC	QUANTITY
1	RING SPANNER (PYE) (8 TO 32)	2
2	SCREW SPANNER (PYE) 12"	1

3	OPEN SPANNER (PYE) (8 TO 32)	2
4	CUTTING PLIER (PYE HEAVY INSULATOR)	3
5	NOSE PLIER (PYE HEAVY INSULATOR)	3
6	SCREW DRIVER (STAR PYE) 1 SET	10
7	SCREW DRIVER (MINUS PYE) 1 SET	10
8	BALLPEEN HAMMER (1LB) (JETYAM)	3
9	BALLPEEN HAMMER (2LB) (JETYAM)	2
10	CLAW HAMMER (1LB) (JETYAM)	6
11	CROSS AND PIN HAMMER (1LB) (JETYAM)	4
12	CLUB HAMMER (1LB) (JETYAM)	4
13	SLUDGE HAMMER (1LB) (JETYAM)	4
14	SOFT FACT HAMMER (1LB) (JETYAM)	6
15	MALLET	6
16	CROSS AND STRAIGHT HAMMER (1LB) (JETYAM)	2
17	POWER HAMMER (POWER TOOL) (BOSCH)	1
18	WOOD CUTTING SAW 15" (TAPPER)	10
19	WOOD CUTTING SAW 10" (PARALLEL)	10
20	WOOD CUTTING SAW (HACKSAW 12") (PARALLEL)	20
21	POWER SAW 6"7POWER TOOL) (BOSCH)2 BLADES	1
22	FLAT FILE 10" (SMOOTH)	5
23	FLAT FILE 10" (MEDIUM)	5
24	FLAT FILE 10" (ROUGH)	5

25	ROUND FILE 10" (SMOOTH)	5
26	ROUND FILE 10" (MEDIUM)	5
27	ROUND FILE 10" (ROUGH)	5
28	SQUARE FILE 10" (SMOOTH)	5
29	SQUARE FILE 10" (MEDIUM)	5
30	SQUARE FILE 10" (ROUGH)	5
31	HALF ROUND FILE 10" (SMOOTH)	5
32	HALF ROUND FILE 10" (MEDIUM)	5
33	HALF ROUND FILE 10" (ROUGH)	5
34	TRIANGLE FILE	5
35	KNIFE EDGE FILE	5
36	CENTRE PUNCH	3
37	LETTER PUNCH (A TO Z)	1
38	NUMBER PUNCH (0 TO 9)	1
39	LEATHER HOLE PUNCH (SCRIBER 6'	1
40	SCRIBER	6
41	STEEL RULE	30
42	TRY SQUARE 6"	30
43	DIVIDER 6"	30
44	PIPE VICE	3
45	BENCH VICE	3
46	PIPE WRENCH 8"	1

47	PIPE WRENCH 10"	1
48	PIPE WRENCH 12"	1
49	PIPE WRENCH 14"	1
50	PIPE WRENCH 18"	1
51	PIPE WRENCH 24"	1
52	CHAIN WRENCH 3"	1
53	PIPE CUTTER	1
54	SINGLE WAY PIPE THREDED SET	2
55	PIPE DIE (1/2")	3
56	PIPE DIE (3/4")	3
57	PIPE DIE (1") (BSF)	3
58	TAPPING HOLDER (3/4")	2
59	TAPPING (6 MM)	2
60	TAPPING (10 MM)	2
61	TAPPING (12 MM)	2
62	DRILL PIT (1TO 18 MM)	1
63	CONCRETE JAMPER BIT (1 T012 MM)	1
64	HEAVEY DUTY HAND DRILLING MACHINE(BOSCH)	2
65	MEASURING TAPE (30M)	2
66	STEEL TAPE (3M)	3
67	TEFLAN TAPE (3M)	3
68	SPIRIT LEVEL 12"	3

69	MORTISE CHISEL WITH HANDLE (1/2")	30
70	MORTISE CHISEL WITH HANDLE (3/4")	30
71	MORTISE CHISEL WITH HANDLE (1*)	30
72	BUTT CHISEL 1/2"	6
73	CARVING CHISEL 1/2"	6
74	DOVETAIL CHISEL 1/2"	6
75	FLOORING CHISEL	6
76	BEVEL CHISEL 1/2"	6
77	JACK PLANE	6
78	POWER JACK PLANE	1
79	C CLAMP	6
80	CARPENTARY TRY SQUARE	3
81	MARKING GAUGE ADJUSTABLE	10
82	NAIL PULLER	3
83	WONDER BAR PRY BAR (PACKING REMOER)	2
84	SECURITY LOCKS 6 LEVERS 50mm 3 KEYS	12
85	MAKE GLOBE LOCK 7 LEVERS 75mm 3 KEYS	12

Name of the Laboratory: 6. Environmental Engineering Laboratory

List of Equipments available:

SL.NO	NAME OF THE EQUIPMENT	QUANTITY
1	PH METER REPLACEABLE BATTERIES HAVE LIFE 700 HRS	1
2	ELECTRIC CONDUCTIVITY TESTER	1
3	PORTABLE TURBIDITY METER	1
4	WATER BATH CONCENTRIC RING 75 MMDIA	1
5	HEATING MANTLE (AMBIENT TO 450 DEG C	1
6	HOT PLATE ROUND SHAPE 20CM DIA	1
7	AIR PUMP 4WAY WITH CONTROLLER 12W OXYGEN SUPPLY	4
8	HANDHELD TDS METER	1
9	FLAME PHOTOMETER	1
10	ELECTRODE NITRITE	1
11	JAR TEST APPARATUS	1
12	BOD INCUBATOR	1
13	ION ANALYSER	1
14	ELECTRODE - FLUORIDE	1
15	MUFFLE FURNACE	1
16	ELECTRONIC WEIGHT BALANCE 2KG	1
17	ELECTRONIC WEIGHT BALANCE 100 g	1
18	OXYGEN ANALYSER	1
19	ELECTRODE - CHLORIDE	1
20	COD ANALYSER WITH COD DIGESTION APPARATUS	1
21	SPECTROPHOTOMETER	1
22	ELECTRODE - CALCIUM	1
23	JAR TEST APPARATUS	1
24	DISSOLVED OXYGEN ANALYSER	1

25	HOT AIR OVEN	1
26	WATER STILL (TABLE TOP)	1
27	BIOLOGICAL MICROSCOPE	1
28	REFRIGERATOR	1
29	ELECTRONICWEIGHT BALANCE (220 GM)	1
30	SEDIMENTION ANALYSIS ANDREASEN PIPETTE STAND	1

Name of the Laboratory: 7. Soil Mechanics Laboratory

List of Equipments available:

S.NO	EQUIPMENT LIST	NUMBER OF QUANTITY
1	SIEVE SHAKER (CRYRATORY) (MACHINE ONLY)	2
2	DIGITAL TOP PAN BALANCE PAN SIZE (280*250MM)	2
3	MOTORISED LIQUID LIMIT APPARTUS	2
4	PLASTIC LIMIT APPARATUS	2
5	SHRINKAGE LIMIT SET	2
6	CORE CUTTER (127.3 MM LONG AND 1000MM INTERNAL DIAMETER)	2
7	SAND POURING CYLINDER	2
8	STANDARD LIGHT COMPACTION APPARATUS	2
9	MODIFIED (HEAVY)COMPACTION APPARATUS	2
10	SOIL PERMEABILITY APPARATUS	1
11	LABORATORY OVEN	1
12	STANDARD PENETRATION TESTING EQUIPMENTS	1 SET
13	DIRECT SHEAR APPARATUS	1
14	CALIFORNIA BEARING RATIO APPARATUS	1

15	SOIL CORE CUTTER WITH DALLY & RAMMER	1
16	CBR MOULD SURCHARGE WEIGHT WHEEL BARROW	1
17	TRI AXIAL TESTING APPARATUS	1
18	DIRECT SHEAR APPARATUS & HAND OPERATED EXTRACTOR	1

Name of the Laboratory: 8. CADD Laboratory

List of Equipments available:

S.NO	EQUIPMENT LIST	NUMBER OF QUANTITY
1	COMPUTER WITH ACCESSORIES AND TABLE	30