

DEPARTMENT: CIVIL ENGINEERING

SL NO	NAME OF THE LABORATORY	NAMES OF THE EQUIPMENTS	NAMES OF THE EXPERIMENTS
1	STRUCTURAL ENGG. LAB	UNIVERSAL TESTING MACHINE(UTM)	Determination of Young's Modulus of a material in a tensile testing machine
		COMPRESSION TESTING MACHINE(CTM)	Determination of Compressive Strength of cement .
		SLUMP CONE	Determination of Workability of concrete
		COMPACTION FACTOR APPARATUS	Determination of Workability of concrete
		OVEN	Determination of water absorption of bricks and aggregates.
		ULTRASONIC PULSE VELOCITY MEASUREMENT APPARATUS(NDT)	Non Destructive test on Concrete.
		LE CHATILIERS APPARATUS	Determination of soundness of Cement by Le-Chatelier apparatus.
		VICAT'S APPARATUS	Determination of initial and final setting time of cement.
		MORTAR CUBE VIBRATOR	Determination of Compressive Strength of cement .
2	GEOTECHNICAL ENGG. LAB	CBR APPARATUS	Determination of CBR value using Laboratory CBR Testing device.
		CONOLIDATION TEST APPARATUS	Determination of Coefficient of Consolidation of soil with Consolidation apparatus
		TRIAxIAL SHEAR APPARATUS	Determination of C and Φ of Soil sample by Triaxial Test device.
		SIEVE SHAKER	Determination of Particle Size gradation of sand/Gravel by sieve analysis.
		PERMEABILITY APPARATUS	Determination of Coefficient of permeability of course grained soils under constant head method.
		PLATE LOAD TEST APPARATUS	Determination of SBC of soil .
		DCPT APPARATUS	Determination of SBC of soil .
		SWELLING INDEX APPARATUS	Determination of Swelling Index, Swelling factor & Swelling pressure of expansion.
		PLASTIC LIMIT APPARATUS	Determination of Plastic limit of soil.
		SHRINKAGE LIMIT APPARATUS	Determination of Shrinkage limit of soil.
		SPECIFIC GRAVITY APPARATUS	Determination of Specific gravity of Soil by Pycnometer/Density bottle.
CORE CUTTER	Determination of Field Density of Soil by Core Cutter Method.		
3	TRANSPORTATION ENGG. LAB	BITUMEN EXTRACTOR	Determination of Bitumen content by centrifuge extractor.
		DUCTILITY TEST OF BITUMEN	Ductility Test of Bitumen.
		SOFTENING POINT TEST APPARATUS	Softening point Test of Bitumen
		ELONGATION,FLAKINESS INDEX APPARATUS	Determination of Flakiness, Elongation & Angularity No. of Road aggregates
		CRUSHING VALUE OF AGGREGATE	Determination of Crushing Value Test of aggregates
		LOS ANGEL'S APPARATUS	Los-Angles Abrasion Test of aggregate.
		IMPACT TEST APPARATUS	Impact test of aggregate
4	SURVEYING LAB	METRIC ,REVENUE,GUNTER'S,ENGINEER CHAIN,STEEL BAND	Testing and adjusting of a metric chain,Measurement of distance between two points (more than 2 chain lengths apart) with chain including direct ranging.
		TOTAL STATION	Preparation of maps,volume calculations.
		AUTO LEVEL,DUPMY LEVEL	Determination of RLs of any point w.r.t. any datum.

		PRISMATIC,SURVEYOR COMPASS	Measurement of bearings of lines (at least 3 lines) and determination of included angles using Prismatic compass and Surveyor's compas
		CROSS STAFF,OPTICAL SQUARE	Setting perpendicular offsets to various objects (at least 3) from a chain line
		MEASURING TAPE	Setting out different types of triangles, given the lengths of sides with chain and tape.
		CLINOMETER	Measurement of distance between two points by chaining across a sloped ground using stepping method and a clinometer
		PLANE TABLE	Conducting Plane Table surveying in a given plot of area by traversing
		TRANSIT THEODOLITE	Measurement of horizontal angles and verical angles.
		ELECTRONICS THEODOLITE	Measurement of horizontal angles and verical angles.
		RANGING RODS	Measurement of distance between two points (more than 2 chain lengths apart) with chain including direct ranging
		PLANIMETER	Determination of area of land from maps.
5	PUBLIC HEALTH ENGG. LAB	PH METER	Determination of pH of Water sample using pH – meter .