

**MAIT CIVIL**
**List of Testing/ Synthesis/ Characterization/ Machining equipment at MAU**

S. No.	Name of Equipment	Brand/Model/ Make	Type of Equipment	Specifications	Testing/ Characterization Parameter	Department & School
			<b>Testing/Synthesis etc.</b>			
1	Compressive strength test apparatus	Survey Engineering	Testing	Capacity 200 kN	Compressive strength for cement/ concrete/ brick samples	Civil Engineering Department
2	Wire basket	Survey Engineering	Testing	-	Specific gravity of coarse aggregate	Civil Engineering Department
	Pycnometer bottle	Mars & Edpal Instruments Pvt. Ltd.	Testing	About 1 litre capacity	Specific gravity of fine aggregate (sand)	Civil Engineering Department
3	Grain size analysis apparatus	Mars & Edpal Instruments Pvt. Ltd.	Testing	Sieve shaker with sieve 75 microns to 60 mm.	Sieve analysis of fine and coarse aggregates	Civil Engineering Department
4	Aggregate crushing value test	Mars & Edpal Instruments Pvt. Ltd.	Testing	For 10 mm to 60 mm of size	Crushing value of coarse aggregates	Civil Engineering Department
5	Aggregate impact value test	Mars & Edpal Instruments Pvt. Ltd.	Testing	For 10 mm to 20 mm of size	Impact value of coarse aggregates	Civil Engineering Department
6	Bitumen extraction test apparatus	Mars & Edpal Instruments Pvt. Ltd.	Testing	-	Asphalt in a paving mixture	Civil Engineering Department
7	Ductility test apparatus	Mars & Edpal Instruments Pvt. Ltd.	Testing	-	Ductility of bitumen	Civil Engineering Department
8	Flash and fire point apparatus	Mars & Edpal Instruments Pvt. Ltd.	Testing	-	Flash and fire point temperatures of bitumen	Civil Engineering Department
9	Los angeles abrasion testing	Mars & Edpal Instruments Pvt. Ltd.	Testing	-	Aggregate abrasion value	Civil Engineering Department
11	Penetration test apparatus	Mars & Edpal Instruments Pvt. Ltd.	Testing	-	Penetration value of bitumen	Civil Engineering Department
12	Ring and ball apparatus	Mars & Edpal Instruments Pvt. Ltd.	Testing	-	Softening point of bitumen	Civil Engineering Department
13	Core cutter apparatus	Mars & Edpal Instruments Pvt. Ltd.	Testing	-	In situ dry density of natural or compacted fine grained soil, free from aggregates	Civil Engineering Department
14	California bearing ratio test apparatus (usually called CBR test)	Mars & Edpal Instruments Pvt. Ltd.	Testing	-	Relative bearing ratio and expansion characteristics under known surcharge weight of base, subbase and sub grade soils.	Civil Engineering Department
15	Liquid and plastic limit test apparatus	Mars & Edpal Instruments Pvt. Ltd.	Testing	-	Liquid limit, plastic limit and plasticity index of soils	Civil Engineering Department
16	Permeability test apparatus	Mars & Edpal Instruments Pvt. Ltd.	Testing	-	Permeability of soils using a constant or variable head	Civil Engineering Department
17	Proctor compaction test apparatus	Mars & Edpal Instruments Pvt. Ltd.	Testing	-	Optimal moisture content at which a given soil type will become most dense and achieve its maximum dry density	Civil Engineering Department

18	Rapid moisture meter	Mars & Edpal Instruments Pvt. Ltd.	Testing	Range 25-50%	To quickly determine the water content at site, without having to wait for the moisture to evaporate.	Civil Engineering Department
19	Sand pouring cylinder apparatus	Mars & Edpal Instruments Pvt. Ltd.	Testing	Layer exceeding 15 cm but not exceeding 25 cm thickness.	Dry density of natural or compact soil containing stones, fine, medium grained soils	Civil Engineering Department

**MAIT CSE**

**List of Testing/ Synthesis/ Characterization/Machining equipment at MAU**

S. No	Name of Equipment	Brand/Model/ Make	Type of Equipment	Specifications	Testing/ Characterization Parameter	Department & School
			<b>Testing/Synthesis etc.</b>			
1	Computer Systems	Hp(3) , N-Computing(53)	Computer systems	Desktop:HP Pro 3330 MTPC(Core i3;3.30 Ghz;DDR-3;2GB RAM;320 GB HD(Min); Keyboard: KU-0316(104 Keys); Mouse: Optical (3-Button); Monitor: N-Computing Devices : L-300 (Keyboard:Dell KB 212-B; Mouse:Optical Mouse MS111;Monitor:		CSE(MAIT)
2	Switch	D-link	Switch	D-Link DGS 1500-		CSE(MAIT)
	Printer HP Laserjet 1020 Plus	HP	Printer	Printer HP Laserjet 1020		
3	Computer Systems	Hp(20)	Computer systems	Desktop:HP Pro 3330 MTPC(Core i3;3.30 Ghz;DDR-3;2GB RAM;320 GB (For 15 Systems), 500 GB( For 5 Systems);HD(Min ); Keyboard: KU-0316(104 Keys); Mouse: Optical (3-Button); Monitor:		CSE(MAIT)
	Printer HP Laserjet 1020 Plus	HP	Printer	Printer HP Laserjet 1020		

4	Computer Systems	DELL(20),HP(6)	Computer systems	Desktop:HP Pro 3330 MTPC(Core i3;3.30 Ghz;DDR-3;2GB RAM;320 GB ;HD(Min); Keyboard: KU-0316(104 Keys); Mouse: Optical (3-Button); Monitor:		
				Desktop:DELL 3020 MT (Core i3; 3.5 GHz DDR-3;4 Gb; 500 GB HDD;Keyboard : Normal(104 keys); Mouse: Optical;(3-button);		
5	Switch	D-link	Switch	D-Link DGS 1500-		
	Printer HP Laserjet 1020 Plus	HP	Printer	Printer HP Laserjet 1020		
6	Computer Systems	DELL(20),HP(6)	Computer systems	Desktop:HP Pro 3330 MTPC(Core i3;3.30 Ghz;DDR-3;2GB RAM;320 GB ;HD(Min); Keyboard: KU-0316(104 Keys); Mouse: Optical (3-Button); Monitor:		
				Desktop:DELL 3020 MT (Core i3; 3.5 GHz DDR-3;4 Gb; 500 GB HDD;Keyboard : Normal(104 keys); Mouse: Optical;(3-button);		
7	Switch	D-link	Switch	D-Link DGS 1500-		
	Printer HP Laserjet 1020 Plus	HP	Printer	Printer HP Laserjet 1020		
				Desktop:HP Pro 3330 MTPC(Core i3;3.30 Ghz;DDR-3;2GB RAM;320 GB ;HD(Min); Keyboard: KU-0316(104 Keys); Mouse: Optical (3-Button); Monitor: LED (18.5		

	Computer Systems	HP	Computer systems	Desktop: HP Pro 3090 MTPC;Core 2 Duo; 2.93 GHz; DDR-3;20 GB SATA; 320 gb;Keyboard (Normal);104 Keys; Optical 3 button;Monitor LED(18.5 inch)		
9				Desktop: HP Pro Core i3;3.30 Ghz DDR-3; 2.0 Gb RAM;320 GB HDD;Keyboard; Mouse(Optical); Monitor(18.5		
	Switch	D-link	Switch	D-Link DGS 1500-		
10	Printer HP Laserjet 1020 Plus	HP	Printer	Printer HP Laserjet 1020		
	Headset	Logitech	Headset	H-110 sterio Headset Logitech		

### MAIT EEE

#### List of Testing/ Synthesis/ Characterization/Machining equipment at MAU

S. N	Name of Equipment	Brand/Model/ Make	Type of Equipment	Specifications	Testing/ Characterization Parameter	Department & School
			<b>Testing/Synthesis etc.</b>			
1	Panel for DC Network Analyser	Rajat(PREMIER TRADING CORPORATION)	Testing	DC Network analyzer	Testing Equipments	EEE
2	Panel for AC Network Analyser	Rajat(PREMIER TRADING CORPORATION)	Testing	AC Network analyzer	Testing Equipments	EEE
3	Panel for IDMT Over Current Relay	Rajat(PREMIER TRADING CORPORATION)	Testing	IDMT Relay with Button	Characterization Parameters	EEE
4	Panel for Merz-Price Protection Relay	Rajat(PREMIER TRADING CORPORATION)	Testing	Merz-Price protection relay electronic type, Auto-transformer 270	Testing Equipments	EEE
5	Panel for Three Phase Fault	Rajat(PREMIER TRADING CORPORATION)	Testing	Three phase earth fault relay with AC	Testing Equipments	EEE
6	Panel for P-N Diode Characteristics	Rajat(PREMIER TRADING CORPORATION)	Testing	PN Junction Diode	Characterization Parameters	EEE
7	Panel for V-I Characteristics of SCR	Rajat(PREMIER TRADING CORPORATION)	Testing	SCR 604 with patch chords	Characterization Parameters	EEE
8	Panel for V-I Characteristics of TRIAC	Rajat(PREMIER TRADING CORPORATION)	Testing	TRIAC (BT) 136 with continously variable power	Characterization Parameters	EEE
9	Panel to study Characteristics of Junction Transistor in	Rajat(PREMIER TRADING CORPORATION)	Testing	S 1-100 transistors with patch chords	Characterization Parameters	EEE

10	Panel to study Mosfet Characteristics	Rajat(PREMIER TRADING CORPORATION)	Testing	MOSFET	Characterization Parameters	EEE
11	Panel to study R&C Triggering Circuits	Rajat(PREMIER TRADING CORPORATION)	Testing	SCR with triggering circuit	Testing Equipments	EEE
12	Panel to study UJT Triggering Circuit	Rajat(PREMIER TRADING CORPORATION)	Testing	UJT triggering circuit with 3 Amp fuse and	Testing Equipments	EEE
13	Panel to study AC Phase Control using SCR	Rajat(PREMIER TRADING CORPORATION)	Testing	SCR 604 with patch chords	Testing Equipments	EEE
14	Panel To Study Three Phase Full Wave Uncontrolled Rectifier	Rajat(PREMIER TRADING CORPORATION)	Testing	Three phase bridge rectifiers	Characterization Parameters	EEE
15	Panel to study DC Chopper (Jones & Morgons Chopper)	Rajat(PREMIER TRADING CORPORATION)	Testing	Morgons chopper and Jones Chpper with patch cords	Characterization Parameters	EEE
16	Panel to study Micro Controller Based Single Phase Cyclo Converter	Rajat(PREMIER TRADING CORPORATION)	Testing	Two fully controlled bridge convertor with microcontroller	Characterization Parameters	EEE
17	Panel to study Single Phase Fully Controlled Bridge Converter(Low Power Rating)	Rajat(PREMIER TRADING CORPORATION)	Testing	Single phase fully controlled bridge convertor with battery charger and lamp holder	Characterization Parameters	EEE
18	Panel to study Phase Control Circuit using TRIAC with Motor CRO 30 Mhz Dual Trace Scientific	Rajat(PREMIER TRADING CORPORATION)	Testing	TRIAC (BT) 136 with continously variable power supply	Testing Equipments	EEE
19	Panel for study A,B,C,D,Hybrid & image parameter of given transmission	Rajat(PREMIER TRADING CORPORATION)	Testing	220 Volts, 2Amps, LPF Wattmeter	Characterization Parameters	EEE
20	Panel for study Ferranti effect & voltage distribution in HV Long transmission	Rajat(PREMIER TRADING CORPORATION)	Testing	Transmission line model with 220Volts, 2 Amps	Testing Equipments	EEE
21	Panel for study characterstics of a DC distribution system(radial configuration)	Rajat(PREMIER TRADING CORPORATION)	Testing	DC Distribution network, 110 Volts, 2 Amp, 5 Digital Ammeters	Characterization Parameters	EEE
22	Panel for study characterstics of a DC distribution system(ring configuration)	Rajat(PREMIER TRADING CORPORATION)	Testing	DC Distribution network, 110 Volts, 2 Amp, 5 Digital Ammeters	Characterization Parameters	EEE
23	Panel for study equipotential line of paper model of single layer cable	Rajat(PREMIER TRADING CORPORATION)	Testing	Ac Supply, Singlr layer cable, Multimeter	Testing Equipments	EEE

24	Panel for study equipotential line of paper model of multi layer cable	Rajat(PREMIER TRADING CORPORATION)	Testing	Multilayer acralic sheet with AC supply	Testing Equipments	EEE
25	Panel for study earth resistivity and resistance of earth elactrode and earth tester	Rajat(PREMIER TRADING CORPORATION)	Testing	IEE wire Earth tester	Testing Equipments	EEE
26	Megger hand generated type	Rajat(PREMIER TRADING CORPORATION)	Testing	Insulator String containing 20 disk	Testing Equipments	EEE
27	Panel to study Find Out the voltage Distribution Across the String Insulator with & without Guard	Rajat(PREMIER TRADING CORPORATION)	Testing	Insulator String containing 20 disk	Testing Equipments	EEE
28	DC Control System	Rajat(PREMIER TRADING CORPORATION)	Testing	Operating voltage : 12 Vdc, 5W. Rated shaft speed : 50 RPM ( reduced by gear train, otherwise 24= .02 )Torque :	Testing Equipments	EEE
29	Magnetic Amplifier	Rajat(PREMIER TRADING CORPORATION)	Testing	Self saturation reactor	Characterization Parameters	EEE
30	Microcontroller based Stepper Motor	Rajat(PREMIER TRADING CORPORATION)	Testing	Stepper MotorStepping angle : 30 + Non - cumulative. Step / resolution : 120 / rev Torque : 1.0 Kg / cm. Supply : DC 6 V /	Testing Equipments	EEE
31	Speed Torque Characteristics of servo motor.	Rajat(PREMIER TRADING CORPORATION)	Testing	AC Servomotor	Testing Equipments	EEE
32	Synchro Transmitter Reciever	Rajat(PREMIER TRADING CORPORATION)	Testing	1 : 10 for waveform observation	Characterization Parameters	EEE
33	Panel for measuring power and power factor drawn by a 1 phase AC circuit, using three	Rajat(PREMIER TRADING CORPORATION)	Testing	Voltmeter-(0-300V),Ammeter(0-5A),Single phase variac	Testing Equipments	EEE
34	Panel for measuring power and power factor drawn by a 1 phase AC circuit, using three	Rajat(PREMIER TRADING CORPORATION)	Testing	Voltmeter-(0-300V),Ammeter(0-5A),Single phase variac	Testing Equipments	EEE

35	Panel for measuring power and power factor drawn by a 3 phase Resistive load using two	Rajat(PREMIER TRADING CORPORATION)	Synthesis	Dynometer Type-(5/10A,125/250 /500V)	Testing Equipments	EEE
36	Desaulty Bridge.	Rajat(PREMIER TRADING CORPORATION)	Synthesis	R1, R2:-Two decade dial of X10 & X100 Ohm,C2:- Decade dial of X0.1 Mfd.	Characterization Parameters	EEE
37	Kelvin Bridge.	Rajat(PREMIER TRADING CORPORATION)	Synthesis	One Ratio dial of 100,10, 1, 0.1 & 0.01,Resistance of 0.1 ohm divided into 100 equal steps of	Characterization Parameters	EEE
38	Maxwell Bridge.	Rajat(PREMIER TRADING CORPORATION)	Synthesis	R3 = Two Decade Dial of X10 and X100 ohms. R4 = Two Decade Dial of X10 and X100 ohms. L2 = Decade Dial of X10 mh,R2 = Decade Dial of X1 ohm	Characterization Parameters	EEE
39	Wein's frequency Bridge.	Rajat(PREMIER TRADING CORPORATION)	Synthesis	R3 = Two Decade Dial of X10 and X100 ohms. R4 = Two Decade Dial of X10 and X100 ohms. L2 = Decade Dial of X10 mh,R2 = Decade Dial of X1 ohm	Characterization Parameters	EEE
40	C.T., P.T. and wattmeter.	Rajat(PREMIER TRADING CORPORATION)	Synthesis	Potential Transformer 110/440 V, Ammeter MI Type 0-10A , Voltmeter MI Type 0-300V ,Wattmeter Dynamometer type 2.5/5A, 75/150/300V	Testing Equipments	EEE
41	Single phase Energy Meter.	Rajat(PREMIER TRADING CORPORATION)	Synthesis	1-Phase Energy Meter (Electromagnetic type)	Testing Equipments	EEE
42	PANEL FOR SINGLE PHASE TRANSFORMER-TURN RATIO, POLARITY,OC &SC TEST	Rajat(PREMIER TRADING CORPORATION)	Synthesis	SINGLE PHASE ISOLATION TRANSFORMER (1KVA)	Testing Equipments	EEE

43	PANEL FOR SINGLE PHASE TRANSFORMER-SUMPNER'S TEST & PARALLEL OPERATION	Rajat(PREMIER TRADING CORPORATION)	Synthesis	SINGLE PHASE ISOLATION TRANSFORMER (1KVA)	Testing Equipments	EEE
44	PANEL FOR SINGLE PHASE TRANSFORMER-SCOTT	Rajat(PREMIER TRADING CORPORATION)	Synthesis	SINGLE PHASE ISOLATION TRANSFORMER (1KVA)	Testing Equipments	EEE
45	PANEL FOR SPEED TORQUE CHARACTERISTICS OF DC SERIES MOTOR WITH	Rajat(PREMIER TRADING CORPORATION)	Testing	DC SERIES MOTOR (1 HP)	Testing Equipments	EEE
46	PANEL FOR SPEED CONTROL OF DC SHUNT MOTOR WITH LOAD	Rajat(PREMIER TRADING CORPORATION)	Testing	DC SHUNT MOTOR (1 HP)	Testing Equipments	EEE
47	AUTOTRANSFORMER STARTER	Rajat(PREMIER TRADING CORPORATION)	Testing	VARIABLE AUTO TRANSFORMER (SINGLE PHASE	Testing Equipments	EEE
48	LOAD CHARACTERISTICS OF DC SHUNT GENERATOR	Rajat(PREMIER TRADING CORPORATION)	Testing	FUNCTION GENERATOR	Characterization Parameters	EEE
49	NO LOAD AND BLOCK TEST ON THREE PHASE INDUCTION MOTOR	Rajat(PREMIER TRADING CORPORATION)	Testing	THREE PHASE INDUCTION MOTOR CONTROLLER WITH IGBT	Characterization Parameters	EEE
50	SYNCHRONIZATION PANEL FOR PARALLEL OPERATION OF THREE PHASE AC GENERATOR	Rajat(PREMIER TRADING CORPORATION)	Testing	AC SYNCHRONOUS GENERATOR	Characterization Parameters	EEE
51	MG SET- AC SYNCHRONOUS MOTOR/ DC GENERATOR V-CURVES	Rajat(PREMIER TRADING CORPORATION)	Testing	REGENERATIVE BRAKING OF SEPARATELY EXCITED DC MOTOR WITH DC	Characterization Parameters	EEE
52	PANEL FOR $X_d$ & $X_q$ OF SYNCHRONOUS MACHINE BY SLIP	Rajat(PREMIER TRADING CORPORATION)	Testing	SYNCHRONOUS GENERATOR/MOTOR	Characterization Parameters	EEE
53	VERIFICATION OF NETWORK THEOREMS (SUPERPOSITION, NORTON, THEVENIN, MAXIMUM POWER TRANSFER	Rajat(PREMIER TRADING CORPORATION)	Testing	Panel for various theorems	Characterization Parameters	EEE
54	LCR RESONANCE CIRCUITS	Rajat(PREMIER TRADING CORPORATION)	Testing	LR,LCR,LC RESONANCE CIRCUIT	Characterization Parameters	EEE
55	VERIFICATION OF KCL, KVL	Rajat(PREMIER TRADING CORPORATION)	Testing	GODOWN WIRING BOARD	Characterization Parameters	EEE



56	SINGLE PHASE TRANSFORMER EXPERIMENTS (OC, SC AND DIRECT LOADING)	Rajat(PREMIER TRADING CORPORATION)	Testing	SINGLE PHASE ISOLATION TRANSFORMER (1KVA)	Testing Equipments	EEE
57	SPEED CONTROL OF DC SHUNT MOTOR (ARMATURE AND FIELD CURRENT)	Rajat(PREMIER TRADING CORPORATION)	Testing	DC SHUNT MOTOR (I HP)	Testing Equipments	EEE
58	DETERMINATION OF PARAMETER AND LOSSES IN A SINLE PHASE TRANSFORMER BY OC AND SC	Rajat(PREMIER TRADING CORPORATION)	Synthesis	SINGLE PHASE ISOLATION TRANSFORMER (0.5KVA)	Testing Equipments	EEE
59	TO PERFORM THE BLOCK ROTOR TEST OF THREE PHASE	Rajat(PREMIER TRADING CORPORATION)	Synthesis	INDUCTION MOTOR (3HP) WITH CONNECTED	Testing Equipments	EEE
60	MEASUREMENT OF POWER IN THREE PHASE CIRCUIT BY TWO WATTMETER	Rajat(PREMIER TRADING CORPORATION)	Synthesis	WATTMETER (0-1250)	Testing Equipments	EEE

#### MAIT ME

#### List of Testing/ Synthesis/ Characterization/Machining equipment at MAU

S. N	Name of Equipment	Brand/Model/ Make	Type of Equipment	Specifications	Testing/ Characterization Parameter	Department & School
			<b>Testing/Synthesis etc.</b>			
1	Lathe Machine	Aneja Machinery,	Synthesis	Bed-4.5 ft(qty 1), 3.5 ft (qty 3)		Workshop
2	Drilling Machine	Aneja Machinery,	Synthesis	Column Drilling 1"( qty1), Radial Drilling 1.25"(qy 1)		Workshop
3	Horizontal Milling	Aneja Machinery,	Synthesis	Arbror( 25.4 mm) and Support		Workshop
4	Shaping Machine	Aneja Machinery,	Synthesis	300mm stock		Workshop
5	Grinder	Aneja Machinery,	Synthesis	Surface 500mm Stock lenght(qty 01), Cylinderical 300mm (qty2), Double pedstal 200 mm (qty 01), Tool and cutter		Workshop
6	Power hacksaw	Aneja Machinery,	Synthesis	Blade Size 16" X 1 1/4" X 0.062" 6 TPI		Workshop
7	CNC Lathe	3D Technology Mohali	Synthesis	dia 30 max		Workshop
8	Furnance	Aneja Machinery,	Synthesis	Oil capacity 50 kg		Workshop
9	Welding	Aneja Machinery,	Synthesis	Arc 250 A single Phase, 150 A signle		Workshop

11	MIG Welding	ADOR Welding	Synthesis	Wire speed 12.-18 m/min, Wire 0.8-1.6mm		Workshop
12	TIG Welding	ADOR Welding	Synthesis	Single phase		Workshop