



GEOTECHNICAL ENGINEERING LAB

LIST OF EQUIPMENTS

S.No	Name of Equipment	Cost (Rs)
1	Casagrande liquid limit apparatus	3,500
2	Apparatus for plastic and shrinkage limits	6,000
3	Field density apparatus for a) Core cutter method b) Sand replacement method	6,000
4	Set of sieves	8,000
5	Permeability apparatus for a) Constant head test b) Variable head test	15,000
6	I.S light and heavy compaction test apparatus (3 Nos)	27,000
7	Apparatus for CBR test	85,000
8	Soil sample extractor	8,000
9	Electric oven	19,000
10	One dimensional consolidation test apparatus with all accessories.	33,000
11	Tri-axial cell apparatus	1,67,000
12	Direct Shear apparatus	83,000
13	Laboratory vane shears apparatus	15,000



STRENGTH OF MATERIALS LAB

LIST OF EQUIPMENTS

S.No	Name of Equipment	Cost (Rs)
1	Cantilever beam apparatus	3,000
2	Compression testing machine (CTM)	1,54,000
3	Fixed beam apparatus	2,500
4	Impact testing machine	56,500
5	Rockwell cum brinell hardness tester	62,900
6	Resistance strain gauges (electronic)	18,900
7	Spring testing machine	1,90,600
8	Simply supported beam (SSB)	3,000
9	Torsion testing machine	68,600
10	Uniform bending apparatus	4,000
11	Universal testing machine (UTM)	3,22,700



SURVEYING LAB

LIST OF EQUIPMENTS

S.No	Name of Equipment	Cost (Rs)
1	Measuring chains 30m (10 No's)	12,000
2	Cross staff 100mm (12 No's)	3,500
3	Prismatic compass (10 No's)	22,000
4	Plane table set (10 No's)	42,000
5	Levelling staff 4m (10 No's)	12,000
6	Automatic level	12,000
7	Dumpy level (10 No's)	65,000
8	Digital planimeter	32,000
10	Box sextant	2000
12	Theodolites (10 No's)	2,10,000
13	Total station (2 No's)	5,07,000



TRANSPORTATION ENGINEERING LAB

LIST OF EQUIPMENTS

S.No	Name of Equipment	Cost (Rs)
1	Apparatus for aggregate crushing test	8,000
2	Aggregate impact testing machine	9,000
3	Pycnometers (6 No's)	5,500
4	Los angles abrasion test machine	70,000
5	Deval's attrition test machine	58,000
6	Length and elongation gauges	2,000
7	Bitumen penetration test setup	15,000
8	Bitumen ductility test setup	60,000
9	Ring and ball apparatus	12,000
10	Penskey – Marten's apparatus	22,000



ENVIRONMENTAL ENGINEERING LAB

LIST OF EQUIPMENTS

S.No	Name of Equipment	Cost (Rs)
1	pH meter	10,000
2	Turbidity meter	18,000
3	Conductivity meter	11,000
4	Hot air oven	23,000
5	Muffle furnace	17,500
6	Dissolved oxygen meter	24,000
7	Reflux apparatus	8,000
8	Jar test apparatus	30,000
9	BOD incubator	52,000
10	U.V. Visible spectrometer	1,30,000
11	Water bath	9,000
12	COD Extraction apparatus	10,000



Annamacharya Institute of Technology & Sciences, Tirupathi
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Recognized under section 2(f) & 12(B) of UGC act 1956.

Department of Civil Engineering



ENGINEERING GEOLOGY LAB

LIST OF EQUIPMENTS

S.No	Name of Equipment	Cost (Rs)
1	Mineral samples (50 No's)	13,000
2	Rock samples (50 No's)	15,000
3	Geology maps & cross-section (30 No's)	5,000
4	Geological wood model (strike and dip (8 No's))	13,000
5	Tunnel models (5 No's)	13,500
6	Globes	1,500
7	Geo technical maps	2,000



CONCRETE TECHNOLOGY LAB

LIST OF EQUIPMENTS

S.No	Name of Equipment	Cost (Rs)
1	Set of Sieves	12,000
2	Vicat apparatus (3 No's)	12,000
3	Compaction factor apparatus	15,000
4	Slump test apparatus	2,000
5	Vee-Bee consistometer	30,000
6	Longitudinal compressometer	15,000
7	Vibrating table 1000x1000mm	22,000
8	Rebound hammer	8,000
9	RCPT apparatus	1,45,000
10	Ultrasonic pulse velocity machine	4,35,000
11	Sp. gravity and water absorption	45,000
12	Blain's air permeability apparatus	5,000
13	Concrete pan mixer	1,71,000



ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES
(AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

e-mail: aitscse.tpt@gmail.com

website: aits-tpt.edu.in

Laboratories (Department-wise for UG & PG):

Date: 11-04-2022

a) Consolidated details of existing laboratories

S.No	Name of the course* with Branch	Name of the Laboratory	Equipment	Quantity
1.	B.Tech CSE & M.Tech CSE	A-Block (Computer Center-III) (VINT CERF Lab)	Air-conditioners	02
			Computers	80
			Chairs(Plastic)	84
			Fans	14
			Lights	21
			LAN Switches	04
			LAN Wall Mount	01
			Ups(20KVA)	01
			Tables(Computer)	30
			Round Tables(Computer)	02
			Shoe Stands	05
			Air-conditioners	02
			Computers	80
			(80 Nos M70 seriesLenovo S500 Desktops Pentium I3 processor, Intel H81Chipset, 4GBDDR4, 1TB SATA, “19.5”LED Display,USB Keyboard,USB Mouse.)	



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1.	B.Tech CSE & M.Tech CSE	B-Block (Computer Center-I) (GOSLING Lab & RITCHIE Lab)	Air-conditioners	4
			Computers(230 No's 3597 AH4 Lenovo Desktops, Intel Pentium G630,G-41 Express Chipset, 2GB DD3 RAM(150 No's)8GBDDR3(80 No's) 250GB SATA, "15.6"LED Display,USB keyboard,USB Mouse)	230
			Chairs(Plastic)	230
			Fans	20
			Lights	57
			LAN Switches	11
			LAN Wall Mount	2
			Tables(Computer)	60
			Staff Table& chair	01
			Stool	01
			UPS(External-Online)30KVA with 100AH Batteries	02
			Internet Broad Band Modem	02
			Steel Beeruva	01
			Head sets	60
	Dustbin	1		
	Shoe Stands	4		



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S.No	Name of the course* with Branch	Name of the Laboratory	Equipment	Quantity
1.	B.Tech CSE & M.Tech CSE	C-Block (Computer Center-II) (TIM BERNERS LEE Lab & AHO ULLMAN Lab)	Air-conditioners	9
			Beeruva	01
			White Boards	01
			Computers(Desktop HP280G4-(55), TFT MONITOR(55 No's), Intel Core I3-8100,G-31 Express Chipset, 8GBDDR4,1TB HDD, 18.5" TFT MONITOR, USB keyboard, USB Mouse),	110
			Computers(Desktop HP280G6-(55), TFT MONITOR(55 No's), Intel Core I5-10500,G-31 Express Chipset, 16GBDDR4,1TB HDD, 18.5" TFT MONITOR, USB keyboard, USB Mouse),	
			Chairs(Plastic)	71
			Fans(Ceiling)	13
			Lights	52
			LAN Switches	04
			Printer(Dot Matrix)	02
			Scanner(HP-A4)	01
			Ups(20KVA)	02
			Tables(Computer)	23
			Servers	02
			Laptop	02
			Round Table	02
			White board stand	01
	Wall Mount	01		
	Dustbin	01		
	Shoe Stands	03		



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Laboratories (Department wise for UG & PG):

S.No	Name of the course* with Branch	Name of the Laboratory	Equipment	Quantity
1.	B.Tech CSE & M.Tech CSE	D- Lab (JOHN MCCARTHY Lab)	Air-conditioners	04
			Beeruva	0
			White Boards	0
			HP280G6 Desktop : Core-i5 -10500,16GB DDR4 RAM,1TB HDD ,18.5 TFT Monitor ,USB mouse and USB Key Board	75
			Chairs(Plastic)	80
			Fans(Ceiling)	08
			Lights	24
			LAN Switches	04
			Printer(Dot Matrix)	-
			Scanner(HP-A4)	-
			Ups(20KVA)	1
			Tables(Computer)	08
			Servers	-
			Wall Mount	1
			Dustbin	1
	Shoe Stands	1		

HOD-CSE

Principal



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Ph: 0877 – 2285608/9 website: aits-tpt.edu.in

Department of Electronics and Communication Engineering

Name of Laboratory: Electronic Devices and Circuits Lab

S.No	Name of the Equipment	Quantity	Cost
1	CRO	12	202000
2	DMM	15	18905
3	Bread board trainer kit	8	30600
4	Servo controlled voltage stabilizer	1	9500
5	Function Generators	20	104350
6	Kits for ECA lab	14	27780
7	Regulated Power Supply	12	56855
8	Decade resistance box	6	9900
9	Decade inductance box	6	15600
10	Decade capacitance box	6	13500
11	Ac milli voltmeters	3	10500
12	Analog ammeters	56	59127
13	Voltmeters	28	33892
14	Rheostats	12	60820
TOTAL			653329

Head of the Department

Principal



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Department of Electronics and Communication Engineering

Name of Laboratory: IC APPLICATIONS LAB

S.No	Name of the Equipment	Quantity	Cost
1	Cathode Ray Oscilloscope	18	287000
2	Oscilloscope Probes	20	5000
3	Function Generator	18	94757
4	Regulated Power Supply	13	47718
5	IC Regulated Power supply	3	1350
6	Bread Board Trainer System	7	26775
7	Decade Resistance Box	5	8250
8	Decade Inductance Box	5	13000
9	Decade Capacitance Box	5	11250
10	Linear IC Tester	1	7315
11	Digital Multimeters	7	11041
12	Ammeters	7	5822
13	Voltmeters	6	6669
14	Rheostats	4	8546
15	ASLK Pro Kits	12	75947
16	Servo Controlled Voltage Stabilizer	1	9500
17	Bistable Multivibrator Kit	2	4200
18	Monostable Multivibrator Kit	2	4200
TOTAL			628340

Head of the Department

Principal



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Department of Electronics and Communication Engineering

Name of Laboratory: Signal Processing and VLSI Lab

S.No	Name of the Equipment	Quantity	Cost
1	D-Link 24 Port Switch	3	13650
2	20kva Ups System with Dc Power Pack	1	270000
3	Xilinx9.2 Ise With Trainer Kits	24 USERS & 1 KIT	54288
4	DSP Trainer Kits	3	94500
5	Computers	67	2134620
6	MATLAB 8.2	30 USERS	1086757
7	Multisim Software	05 USERS	157500
8	Plagarism Detector	1	1792
9	Computer	1	24850
10	12v 65ah Quanta VRLA/SMF Battery	20	93000
11	DSP Starter Kit	5	174075
12	CRO	8	156000
13	Function Generators	8	49600
14	RPS	8	53760
15	CRO Probes	10	2500
16	IoT Lab Kits(Set of 30 Items)	20	33000
17	TIVA Launch Pad(15) Pot Meter+Wires(15) Boost XL-Senshub(5) ULN Driver Board(15)	50	42952
TOTAL			4442844

Head of the Department

Principal



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Department of Electronics and Communication Engineering

Name of Laboratory: Microprocessors and Microcontrollers Lab

S.No	Name of the Equipment	Quantity	Cost
1	Computers (Core 2 Duo 2.4 GHz Processor, 1GB RAM, 320GB HDD)	30	672700
2	8086 Microprocessor kit with Power Supply Adapters, TASM and MASM	9	36000
3	8051 Microcontrollers kit with Power Supply Adapters	7	31500
4	8255 Study Cards	8	18600
5	8259 Study Cards	8	19900
6	8251 Study Cards	8	18400
7	Traffic Light Controller Interface	2	1750
8	8279 Study Card	8	20100
9	Elevator Interface	2	1750
10	ADC Interface	8	10450
11	Dual DAC Interface	8	11050
12	NEXSYS 3 Spartan 6 FPGA Board	1	15800
13	MSP 430 Launch Pad, Booster, Experimenter Board and DC Motors and Embedded System kitsMSP430FR5969	15	134513
14	ALS-SDA-86ME Micro Processor trainer kit	16	136000
15	ALS-SDA-51ME Micro Controller Trainer Kit	16	136000
16	RS 232 -9 Pin DB Connector	32	8800
17	26 FRC Cables	16	2640
18	56 FRC Cables	16	3600
19	USB to Serial Converters	32	38400
20	ALS-SDA CPLD/FPGA Universal trainer Kit	1	21866
TOTAL			1339819

Head of the Department

Principal



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Department of Electronics and Communication Engineering

Name of Laboratory: Analog and Digital Communications Lab and MWOC Lab

S.No	Name of the Equipment	Quantity	Cost
1	Microwave Test Benches with Klystron Source	6	390770
2	Microwave Gunn Source	4	270400
3	Optical Communications Kits	8	186100
4	Cathode Ray Oscilloscopes	4	78000
5	Analog Communications Kits	10	28683
6	Analog Communications Kits	2	5533
7	Analog Communications Kits	8	20146
8	Analog Communications Kits	3	11700
9	Cathode Ray Oscilloscopes	7	98000
10	Oscilloscopes Connectors	10	2500
11	Digital Communication Kits	5	192600
12	Dual DC Regulated Power Supplies	3	20160
13	Function Generators	6	37200
14	Digital Multimeters	3	6000
15	DC Kits	5	31800
16	AC Kits	6	18255
TOTAL			1397847

Head of the Department

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Department of Electronics and Communication Engineering

Name of Laboratory: UNMANNED AERIAL VEHICLE (UAV) Lab

(AICTE Sponsored MODROB Lab)

S.No	Name of the Equipment	Quantity	Cost
1	FPV Quadcopter Drone 2.0 MP, WiFi, 720p, 120 degree wide angle camera	1	25,000
2	SYMA X5SW Quad copter 0.3 MP, RTF, WiFi Headless Mode, 6- Axis 360 degree	1	20,400
3	Plastic Quad copter with Propulsion Kit	1	40,700
4	1080p FPV Insight 5G 100mW HDMI Wireless Video Transmitter	1	28,050
5	Micro Quadcopter YH Equipment with 720p camera, Remote Control	1	20,800
6	Sensors	1	15,600
7	RC Flight Simulator	1	10,400
8	Precision Hawk Tool Set	1	5,30,000
9	Miscellaneous Components Connectors, Cables, Wire, Soldering Iron, Plugs, Screws, Bolts, Nuts, and Adhesives		18,000
Sub Total			7,08,950
GST 18%			1,27,611
Grand Total			8,36,561

Head of the Department

Principal



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INSTITUTE OF TECHNOLOGY AND SCIENCES, TIRUPATI
(AUTONOMOUS)



Department of Electrical and Electronics Engineering

Laboratory Hall Name: Control Systems and Simulation lab(15A02405)

Laboratory Hall No:CG04

Academic Year::2021-2022

S.No.	Name of the Equipment	Number Available	Cost of the Equipment (Rs.)
1.	Characteristics of magnetic amplifier	1	16,650/-
2	Effect of feedback on AC Servo Motor	1	16,650/-
3	Characteristics of Synchros (Synchro Transmitter receiver pair)	1	16,650/-
4	Effect of P, PI, PID controller on a second order system	1	11,232/-
5	Linear System Simulator (Time response of second order system)	1	7,904/-
6	Lead and Lag Compensation of Magnitude and Phase Plot	1	8,736/-
7	Transfer function of DC Motor	1	25,380/-
8	Temperature controller using PID	1	15,800/-
9	5kva Servo Stabilizer	1	13,007/-
10	Decade Resistance Box	3	1,000/-
11	Decade Inductance Box	2	1,800/-
12	Decade Capacitance Box	2	2,000/-
13	Programmable logic controller-study & Verification of truth table of logic gates, Simple Boolean Expression	1	36,000/-
14	Effect of feedback on DC Servo Motor.	1	28,800/-
15	CRO Dual Trace 30MHZ	4	78,000/-
16	CRO Probes	8	6,800/-
17	R Load (50Ω/2A)	1	4,125/-
Total Amount			2,90,384/-

HOD-EEE



ANNAMACHARYA
INSTITUTE OF TECHNOLOGY AND SCIENCES,
TIRUPATI:: (AUTONOMOUS)
Department of Electrical and Electronics
Engineering



B. Tech 1st Year-II Semester EEE & ECE, Regulations-(R15)
Academic Year: 2021-2022

Laboratory Hall Name : Electrical Circuits Lab & Network Analysis Lab
Laboratory Code : 15A02302
Laboratory Hall No : BG01-a
AREA : 48 Sq Meters

LIST OF EXPERIMENTS

S.No.	Name of Experiment	Description of Equipment	Make	Number Available	Cost
1	Verification of Thevenin's and Norton's Theorems	Digital Multimeters	PHYSITECH & S.S.LAB	10	20,100.00
2	Verification of Superposition Theorem and Maximum Power Transfer Theorem				
3	Verification of Compensation Theorem	Bread Boards		13	1,210.00
4	Verification of Reciprocity Theorem	Regulated power supply(RPS) Dual	PHYSITECH & S.S.LAB	10	60,320.00
5	Z and Y Parameters				
6	Transmission and Hybrid Parameters				
7	Verification of Millmann's Theorems	Milliman's theorem Kit		1	1,650.00
8	Locus Diagrams of RL and RC Series Circuits	Current locus diagram kit		1	1,650.00
		Decade Resistance Box		2	3,600.00
		Decade Inductance Box		2	6,000.00
		Decade Capacitance Box		2	6,000.00
9	Series and Parallel Resonance	Decade Resistance Box		2	3,600.00
		Decade Inductance Box		2	6,000.00
		Decade Capacitance Box		2	6,000.00
		CRO with probes		5	99,000.00
		Function Generator	SS LAB EQUIPMENTS	2	11,000.00
10	Determination of Self, Mutual Inductances and Coefficient of Coupling	1 phase Variac		1	5,500.00
11	Measurement of Active Power for Star and Delta Connected Balanced Loads	Analog volt meters, AC 600V		3	6,000.00
		Analog ammeter, AC 10 A		3	6,000.00
		UPF watt meter 600V/10A		2	11,000.00
12	Measurement of Reactive Power for Star and Delta Connected Balanced Loads	LPF watt meter 300V/150V, 5A/2.5 A		1	5,500.00
		3 phase resistive load		1	16,600.00
13	Measurement of 3-Phase Power by Two Wattmeter Method for Unbalanced Loads	Three phase Variac		1	22,000.00
		3 phase Inductive load		1	18,000.00
14	Constant K-Low pass & High pass filter	Constant K-Low pass & High pass filter Kit		1	1,800.00
Total					3,18,530.00

LAB INCHARGE

HOD-EEE



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INSTITUTE OF TECHNOLOGY AND SCIENCES, TIRUPATI
(AUTONOMOUS)



Department of Electrical and Electronics Engineering

Laboratory Hall Name: Electrical measurements lab(15A02507)

Laboratory Hall No:CG03

Academic Year :: 2021-2022

Equipments With Cost

S.No.	List of Experiments	Make	Total cost of the Equipments
1	Calibration and Testing of Single Phase Energy Meter	SS Lab equipments	36,000.00
2	Calibration of Dynamometer Power Factor Meter	SS Lab equipments	31,900.00
3	Crompton D.C. Potentiometer Calibration of PMMC Ammeter and PMMC Voltmeter.	SS Lab equipments & Valika Electronics	23,400.00
4	Kelvin's Double Bridge Measurement of Resistance – Determination of Tolerance.	SS Lab equipments & Valika Electronics	10,000.00
5	Measurement of % Ratio Error and Phase Angle of Given C.T. by Comparison.	SS Lab equipments & Valika Electronics	52,950.00
6	Schering Bridge & Anderson Bridge.	SS Lab equipments	14,700.00
7	Measurement of 3 Phase Reactive Power with Single-Phase Wattmeter.	SS Lab equipments & Physitech	44,500.00
8	Measurement of Parameters of a Choke Coil Using 3 Voltmeter and 3 Ammeter Methods.	SS Lab equipments	12,500.00
9	Calibration LPF Wattmeter by Phantom Testing.	SS Lab equipments & Valika Electronics	23,600.00
10	LVDT and Capacitance Pickup Characteristics and Calibration.	SS Lab equipments	10,000.00
11	Resistance Strain Gauge-Strain Measurements And Calibration.	Valika Electronics	13,500.00
12	Measurement of 3 Phase Power with Two Watt Meter Method (Balanced & Un balanced).	Valika Electronics	26,127.00
13	Dielectric Oil Testing Using H.T. Testing Kit.	Valika Electronics	27,500.00
Total Cost			326,677.00

HOD/EEE



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Department of Electrical and Electronics Engineering

Laboratory Hall Name: ELECTRICAL MACHINES- I LAB(15A02302)

Laboratory Hall No:CG08

Academic Year:2021-2022

S.No.	Name of the Equipment	Number Available	Cost of the Equipment (Rs.)
1.	Magnetization characteristics of DC shunt generator. Determination of critical field resistance and critical speed.	1	62,750/-
2	Load test on DC shunt generator. Determination of characteristics	1	62,750/-
3	Load test on DC series generator. Determination of characteristics.	1	62,750/-
4	Load test on DC compound generator. Determination of characteristics.	1	62,750/-
5	Hopkinson's test on DC shunt machines. Predetermination of efficiency	1	62,750/-
6	Fields test on DC series machines. Determination of efficiency.	1	62,750/-
7	Swinburne's test and speed control of DC shunt motor. Predetermination of efficiencies.	1	32,350/-
8	Brake test on DC compound motor. Determination of performance curves.	1	42,750/-
9	Brake test on DC shunt motor Determination of performance curves.	1	42,750/-
10	Separation of losses in DC shunt motor.	1	42,750/-
Total Amount			5,37,100/-

HOD-EEE



ANNAMACHARYA

INSTITUTE OF TECHNOLOGY AND SCIENCES, TIRUPATI
(AUTONOMOUS)



Department of Electrical and Electronics Engineering

Laboratory Hall Name: ELECTRICAL MACHINES- II LAB(15A02506)

Laboratory Hall No:CG01

Academic Year:2021-2022

S.No.	Name of the Equipment	Number Available	Cost of the Equipment (Rs.)
1.	O.C. & S.C. Tests on Single phase Transformers..	1	7,890/-
2	Sumpner's test on a pair of Single phase Transformers.	1	8,990/-
3	Scott connection of Transformers.	1	9,950/-
4	Regulation of a three –phase alternator by Synchronous Impedance Method	1	76,050/-
5	V and Inverted V curves of a three-phase Synchronous Motor.	1	81,650/-
6	Equivalent Circuit of a single phase Induction Motor.	1	29,380/-
7	Determination of X_d and X_q of a Salient pole synchronous Machine.	1	76,050/-
8	Parallel operation of Single Phase Transformers.	1	8,990/-
9	Separation of core losses of a Single Phase Transformer.	1	8,990/-
10	Brake test on Three phase Induction Motor.	1	44,750/-
Total Amount			3,52,690/-

HOD-EEE



ANNAMACHARYA

INSTITUTE OF TECHNOLOGY AND SCIENCES, TIRUPATI
(AUTONOMOUS)



Department of Electrical and Electronics Engineering

Laboratory Hall Name: Power Electronics and Simulation lab(15A02607)

Laboratory Hall No:CG04

Academic Year::2021-2022

S.No.	Name of the Equipment	Number Available	MAKE	Cost of the Equipment (Rs.)
1	Study of characteristics of SCR, MOSFET, IGBT	1	SS LAB	6,050/-
2	Gate firing circuits of SCR's	1		4,345/-
3	Single Phase AC Voltage Controller With R & RL Loads	1		7,480/-
4	Single Phase Fully Controlled Bridge Converter With R & RL Loads	1		24,090/-
5	Forced Commutation Circuits for SCR	1		10,010/-
6	DC Jones Chopper with R & RL Loads	1		20,620/-
7	Single phase Cyclo Converter R & RL Loads	1		28,215/-
8	Single Phase Series Inverter with R & RL Loads	1		18,750/-
9	Single Phase Parallel Inverter with R & RL Loads	1	PHYSITECH POWER SYSTEMS LIMITED	21915/-
10	Single Phase Half Controlled Bridge Converter with R & RL Loads	1		23,275/-
11	Three Phase Half Controlled Bridge Converter R & RL Loads	1		47,390/-
12	Single Phase Dual Converter Trainer Kit	1		19,800/-
13	Rheostats-50Ω/2A	2		2,150/-
14	Rheostats-150Ω/5A	1	6,250/-	
15	Cathode Ray Oscilloscope	7	PHYSITECH	1,43,500/-

16	5 KVA SERVO STABILIZER	1	SS LAB	10,500/-
17	Illumination control/Fan motor control using TRIAC:- Fan motor(230V AC) speed control circuit using Triac-Diac	1		6,500
18	Using TPS7A4901 and TPS7A8300,Study kit	1		20,250
19	Study of DC-DC Buck converter TPS54160 study unit	1		20,250
20	Study of Buck regulator LM3475 study unit	1		20,250
21	WEBENCH EXPERIMENTS	1		18,000
	Accessories required			
	(i)Unregulated power supply 30V/4A	2		25,500
	(ii)4.5 digital resolution Digital Multimeter	1		7,250
	(iii)200 ohms/1.5 amps rheostat	1		3,750
	(iv)10 ohms 50 watts POT	1		1,250
	(v)100 ohms 50 watts POT	1		1,250
	(vi)10 ohms/3amps rheostat	1		3,750
TOTAL AMOUNT				5,28,650/-

HOD-EEE



ANNAMACHARYA

INSTITUTE OF TECHNOLOGY AND SCIENCES, TIRUPATI

Department of Electrical & Electronics Engineering
(AUTONOMOUS)



Laboratory Hall :POWER CONVERTERS Lab
M.TECH

Laboratory Hall No: BG01-A

Academic Year::2021-2022

S. No.	Name of the Equipment	Number Available	Cost of the Equipment (Rs.)	MAKE
1	SPEED MEASUREMENT AND CLOSED LOOP CONTROL USING PMDC MOTOR	1	42,000	S.S Lab Equip
2	THYRISTORISED DRIVE FOR PMDC MOTOR	1	48,300	
3	IGBT USED SINGLE 4QUADRANT CHOPPER DRIVE FOR PMDC MOTOR	1	48,300	
4	THYRISTORISED DRIVE FOR 1 HP DC MOTOR WITH CLOSELOOP CONTROL	1	93,100	
5	THREE PHASE INPUT, THYRISTERISED DRIVE, 3 HP DC MOTOR WITH CLOSED LOOP CONTROL	1	96,600	
6	THREE PHASE INPUT, IGBT, 4 QUADRANT CHOPPER DRIVE FOR DC MOTOR WITH CLOSED LOOP CONTROL	1	88,900	
7	CYCLO CONVERTER ON AC INDUCTION MOTOR	1	37,100	
8	SPEED CONTROL OF THREE PHAS E WOUND ROTOR IM/SLIP RING IM(5 Hp)	1	65,800	
9	3 Hp DC MOTOR WITH LOADING ARRANGEMENTS	1	42,000	
10	0.5 Hp DC MOTOR WITH LOADING ARRANGEMENTS	1	21,000	
Total Amount			5,83,100	

HOD-EEE



ANNAMACHARYA

INSTITUTE OF TECHNOLOGY AND SCIENCES, TIRUPATI
(AUTONOMOUS)



Department of Electrical & Electronics Engineering

Laboratory Hall Name: ELECTRICAL MACHINES & POWER SYSTEMS LAB
M TECH

Laboratory Hall No: BG01-b

Academic Year::2021-2022

S. No.	Name of the Equipment	Number Available	Cost of the Equipment (Rs.)	MAKE
1	CHARACTERISTICS OF IDMT OVER CURRENT RELAY	1	99,600	DELTA ELECTRO SYSTEMS
2	CHARACTERISTICS OF NEGATIVE SEQUENCE RELAY	1	98,800	
3	CHARACTERISTICS OF OVER VOLTAGE RELAY (Electromagnetic type)	1	98,600	
4	CHARACTERISTICS OF OVER VOLTAGE RELAY (Microprocessor type)	1	98,800	
5	CHARACTERISTICS OF PERCENTAGE BIASED DIFF RELAY	1	1,56,700	
6	EQUIVALENT CIRCUIT OF 3WINDING T/F	1	1,65,000	
Total Amount			7,17,500	

HOD-EEE



ANNAMACHARYA

INSTITUTE OF TECHNOLOGY AND SCIENCES, TIRUPATI
(AUTONOMOUS)



Department of Electrical & Electronics Engineering

Laboratory Hall Name: Power Systems & Simulation Lab (15A02710)

Laboratory Hall No: BG01-b

Academic Year::2021-2022

S. No.	Name of the Equipment	Number Available	Cost of the Equipment (Rs.)	MAKE
1	Determination of Sequence Impedances of Cylindrical Rotor Synchronous Machine.	1	1,33,200.00	PHYSITECH POWER SYSTEMS PVT. LTD
2	Fault Analysis – I (i) Line to Line (LL) Fault : (ii) Line to Ground (LG) Fault :	1	35,200.00	
3	Fault Analysis – II: (i) LLG Fault: (ii) LLLG Fault:	1	35,200.00	
4	Determination of Sub-transient Reactance of Salient Pole Synchronous Machine.	1	94,400.00	
5	Equivalent Circuit of a Three Winding Transformer. Equipment Required:	1	33,840.00	
Total Amount			3,31,840.00	

HOD-EEE

Annamacharya Institute of Technology and Sciences: Tirupati
(Autonomous)

Department of Chemistry (H&S)

Chemistry (20ABS9910) & Engineering Chemistry Laboratory (20ABS9909)

List of Equipments

Lab Hall Number: BG05

AY:2021-22

S.No	Name of Equipment	Specifications	No. of Equipment
1	Analytical Balance	Keroy	6
2	Conductivity Bridge	Digisun	11
3	Colorimeter	Elico	2
4	Red Wood Viscometer 1&2	Deep Version	7+7
5	Bomb Calorimeter	Deep Version	1
6	Digital P ^h Meter	Lt10	8
7	Digital Potentiometer	Lt32	9
8	Digital Electronic Balance	Cyber Lab	2
9	Photo Calorimeter	Systronics 113	9

HOD

Principal

Annamacharya Institute of Technology and Sciences: Tirupati
(Autonomous)

Department of English (H&S)

Communicative English Lab (20AHS9901)

Laboratory Hall Number: C207

AY:2021-22

List of Equipments & Components

S.No	Name of the Equipment	Make and Model	Quantity
1	Desktops	Lenovo-M70 Series, G41 Chipset, 4GB RAM, 320GB Hard Disk, 18.5" TFT Screen, Keyboard and mouse.	66
2	Software	K-van solutons	66
3	Headphones	HP headphone with mic	63
4	Sound Amplifier	Ahuja	1
5	Hand mikes	Ahuja	2
6	Air-Conditioners(2 ton Capacity)	LG	4
7	<u>Projector</u>	Casio XJ V1LED Projector	1
8	Wall mount speakers	Ahuja	4
9	Chairs	Neelkamal	67
10	Storewell	Bureau	1

11	Table	Godrej	1
12	White marker board	Sri Balaji paper enterprises, Tirupati	1
13	Network Components: Switches (24 ports)	Immense Technologies, Rajampet	3
14	Wall Rack (9V Rack)	Immense Technologies, Rajampet	1

HOD

Principal

Annamacharya Institute of Technology and Sciences: Tirupati
(Autonomous)

Department of Physics (H&S)

Applied Physics Lab (20ABS9907) & Engineering Physics Lab (20ABS9908)

List of Equipments & Components

Laboratory Hall Number: BG04, DG02&DG04

AY:2021-22

S.No	Name of the Equipment	Make and Model	Quantity
1.	Stewart and Gee's kit	R&Co	8
2.	Travelling Microscope	Weswox Optik	9
3.	Newton's Ring apparatus	R&Co	5
4.	Spectrometer	Weswox Optik Model HLS- 6014949	8
5.	Fiber optic trainer kit	Pico-660nm	3
6.	Energy gap of a semiconductor diode kit	Texla-D33094	5
7.	Hall effect kit	Pico	3
8.	B-H trailer kit	Pico	4
9.	Cathode Oscilloscope (CRO)	Pacific-Dual trace oscilloscope-POS-20	4
10.	He-Ne Laser source	NA	3
11.	Magnetic Stirrer	REMI-2MLH	2

		with hot plate	
12.	Battery Eliminators	R&Co- 2 amps	4
13.	Digital PH meter	Eutek	2
14.	Ultrasonic velocity-acoustic grating kit	Ycoo™	2
15.	Strain gauge (temperature) sensor kit	Ycoo™	3
16.	RC circuit trainer kit with digital meter	Ycoo™	5
17.	Pressure optical fiber sensor kit	Ycoo™	3
18.	Spring constant kit	NA	4
19.	Thermister kit	Ycoo™	3

HOD

Principal

ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: TIRUPATI

Stock Available in respective rooms

Name of the Department : COMPUTER SCIENCE ENGINEERING (CSE)

Sl.No.	Room No.	Fans	Lights	Desks (Mention Seater)	Other items (if any)
1	A 201	6	2	24 (3 Seater)	Camera, Standing Bench
2	A 203	6	2	24 (3 Seater)	Projector, Standing Bench
3	C 404	6	2	24 (3 Seater)	Camera, Bench, Chair
4	A 301	6	2	24 (3 Seater)	Camera, Bench
5	A 304	6	2	24 (3 Seater)	Bench, Chair
6	A 308	6	2	24 (3 Seater)	Camera, Bench
7	A 204	6	2	24 (3 Seater)	Projector, Camera, Bench
8	A 205	6	2	24 (3 Seater)	Projector, Camera, Bench
9	A 208	6	2	24 (3 Seater)	Projector, Camera, Bench
10	A 206 (Faculty Room)	3	2	08 (One Seater)	Computer System in cabin
11	A 202 (faculty Room)	3	2	10 (One Seater)	Computer System in cabin
12	A 303 (faculty Room)	3	2	08 (One Seater)	Computer System in cabin
13	A 207 (HOD Room)	3	2	04 chairs	Computer printer

B. Ramasamy

20/1/20
 HEAD
 Dept. of Computer Science & IT
 Annamacharya Institute of
 Technology & Sciences, Tirupati-517 520



PRINCIPAL

**Annamacharya Institute of
 Technology & Sciences
 Venkatapuram**

Renigunta (M), Tirupati - 517 520

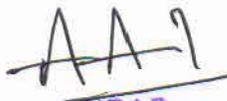
ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: TIRUPATI

Stock Available in respective rooms

Name of the Department : CIVIL ENGINEERING (CE) "A" Block

Sl.No.	Room No.	Fans	Lights	Desks (Mention Seater)	Other items (if any)
1	101	6	2	Nil	Nil
2	102 (Staff Room)	3	2	Faculty Tables 9	Wire Chairs 1 Plastic Chairs 9
3	103	6	2	24 (3 Seater)	Nil
4	104	6	2	24	Projector 1
5	105	6	2	24	Nil
6	106 (Staff Room)	3	2	Faculty Tables :8	Wire chairs 6 Plastic chairs 2
7	107 (Staff Room)	3	3	Faculty Tables 3	Wire chairs 3 Plastic chairs 5
8	108	6	2	24 (3 Seater)	Projector 1
9	109 (DH)	8	4	Drawing Tables 69	Stools 42
10	AG 03	6	2	20	Nil


PRINCIPAL
Annamacharya Institute of
Technology & Sciences
Venkatapuram (V)
Renigunta (M), Tirupati - 517 520


HEAD
Dept. of Civil Engg.
AITS, Tirupati-517 520

ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: TIRUPATI

Stock Available in respective rooms

Name of the Department : HBS

Sl.No.	Room No.	Fans	Lights	Desks (Mention Seater)	Other items (if any)
1	A 409	6	2	24 (3 Seater)	
2	A 411	6	2	24 (3 Seater)	
3	A 406	6	2	24 (3 Seater)	
4	A 408	6	2	24 (3 Seater)	
5	A 405	6	2	24 (3 Seater)	Projector
6	A 401	6	2	24 (3 Seater)	
7	A 404	6	2	24 (3 Seater)	Projector
8	B 405	5	2	24 (3 Seater)	
9	B 404	6	2	24 (3 Seater)	
10	B 403	6	2	24 (3 Seater)	
11	B 402	6	2	24 (3 Seater)	
12	B 401	5	2	24 (3 Seater)	
13	B 410	5	2	24 (3 Seater)	
14	B 406	5	2	22 (3 Seater)	
15	A 410 H& S Staff Room	3	2	5 Tables	3 Systems, 2 printers
16	A 407 Mathematics	3	2	7 Tables	1 System
17	A 402 Physics	3	2	9 Tables	
18	A 403 Chemistry	3	2	9 Tables	


PRINCIPAL
 Annamacharya Institute of
 Technology & Sciences
 Venkatapuram (M)
 Renigunta (M), Tirupati - 517 520


HEAD
 Dept. of Humanities & Basic Sciences
 Annamacharya Institute of
 Technology & Sciences, Tirupati-517

ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: TIRUPATI

Stock Available in respective rooms

Name of the Department : MBA

Sl.No.	Room No.	Fans	Lights	Desks (Mention Seater)	Other items (if any)
1	Hall G C 401	9	4		Chairs 71, Computer 1, White writing board, Mike set 1
2	C 408	6	2	24 (3 Seater)	
3	C 409	6	2	24 (3 Seater)	
4	C 410	6	2	24 (3 Seater)	
5	C 405	6	2	24 (3 Seater)	
6	C 404	6	2	22 (3 Seater)	
7	C 403	6	2	27 (3 Seater)	
8	C 407 (Faculty Room)	3	2		Tables 6, S type chairs 5 Stool 1, C Chairs 5, Plastic chairs 1
9	C 411 (Faculty Room)	3	2		S type chairs 4, C Chairs 2, Tables 5,
10	C 406 (HOD Room)	3	2		Tables 6, S type chairs 6 Racks 3, Biruva 2, Rotation chair 1, C

PRINCIPAL
Annamacharya Institute of
Technology & Sciences
Venkatapuram (V)
Renigunta (M), Tirupati - 517 520

HEAD
Dept. of Management Studies
Annamacharya Institute of
Technology & Sciences, TIRUPATI-517

ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: TIRUPATI

Stock Available in respective rooms

Name of the Department : Electrical & Electronics Engineering (EEE)

Sl.No.	Room No.	Fans	Lights	Desks (Mention Seater)	Other items (if any)
1	BG01 Lab C	5	5	Tables Small 2, Tables big 8, S type chairs 2, Plastic Chairs 4	One Steel Almarah
2	CG01,02 Lab 2 EM	9	4	Wooden Rock 1, Stools 30, Tables Big 3	
3	CG03 Measurements Lab	4	4	Tables Big 3, Plastic Chairs 2, Stools 30	One Steel Almarah
4	CG04 (CS Lab)	4	2	Big Tables 8, Computers 2, Wooden Rock 1, S Type 1	One Steel Almarah
5	CG07,08 EM-1 Lab	9	4	Tables 1 Small, Tables 2 Big, S Type 1, Plastic Chairs 1	
6	C303	6	2	24 (3 Seater)	One Projector
7	C304	6	2	24 (3 Seater)	One Projector
8	C305	6	2	24 (3 Seater)	
9	C306 (HOD Room)	3	2	S Type 1, Plastic Chairs 3, Tables 3, Wooden Rock 1	1 Steel Almarah
10	C307 (Staff Room)	3	2	Tables 9, S Type 5, Plastic Chairs 4	
11	C 301, 302 (Seminar Hall)	8	2		



PRINCIPAL

Annamacharya Institute of
Technology & Sciences
Venkatapuram (V)
Renigunta (M), Tirupati - 517 520



HEAD

Dept. of Electrical & Electronics Engg.
Annamacharya Institute of Technology & Sciences
TIRUPATI - 517 507

ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: TIRUPATI

Stock Available in respective rooms

Name of the Department : MECHANICAL ENGINEERING (ME)

Sl.No.	Room No.	Fans	Lights	Desks (Mention Seater)	Other items (if any)
1	A 305	6	2	24 (3 Seater)	Staff Table 1
2	A 306	6	2	24 (3 Seater)	Nil
3	A 307 (Staff Room)	3	2	Staff Desk 7	S type Chairs 7, Plastic Chairs 4
4	A 309	6	2	24 (3 Seater)	Nil
5	A 310 (HOD Room)	3	3	Staff Table 3	S type Chairs 3, Beeruva 3
6	A 311	6	2	24 (3 Seater)	Nil
7	A 302 (Staff Room)	3	2	24 (3 Seater)	S Type chairs 2, Plastic Chairs 5
8	B 304	6	2	24 (3 Seater)	Nil
9	B 305 (Lab)	6	2	Staff Desk 01	S Type chairs 1 Plastic Chairs 45
10	B 307 (CAD CAM Lab)	10	11	Staff Desk 01 Tables 30	S Type chairs 1 Plastic Chairs 55 Beeruva 1
11	C 09, 10 (Engineering work shop)	15	8	Staff Desk 01 Tables 30	S Type chairs 1 Plastic Chairs 3
12	A01, 02 M.Tech Lab	9	4	Desk 3 Staff Desk 3, Tables 30	S type Chairs 1 Plastic Chairs 2
13	A 09 TE Lab	5	2	Staff Desk 01 Desks 3 Tables 30	S type Chairs 1 Plastic Chairs 2
14	B 03 MFT Lab	5	2	Staff Desk 01 Desks 3 Tables 30	S type Chairs 1 Plastic Chairs 2
15	FM & HM Lab 'D Block)	12	12	Staff Desk 01 Desks 4 Tables 30	S type Chairs 1 Plastic Chairs 2
16	H.T Lab Block D	6	4	Staff Desk 01 Desks 4 Tables 30	Plastic chairs 2
17	MSE Lab D Block	6	4	Staff Desk 01 Desks 4 Tables 30	Plastic chairs 2
18	M & M Lab "D Block	4	2	Staff Desk 01 Desks 3 Tables 30	Beeruva 1 Plastic Chairs 2

PRINCIPAL

Annamacharya Institute of
Technology & Sciences
Venkatapuram (V)

Renigunta (M), Tirupati - 517 520

HEAD

DEPT. OF MECHANICAL ENGG.
AITS., TIRUPATI-517 520.



Laboratories (Department wise for UG):

a) Consolidated details of existing laboratories

S.No	Name of the course* with Branch	Name of the Laboratory	Equipment	Cost
1.	B.Tech – ME	Engineering & IT workshop	Bench Vice (10 Nos),Carpenter Vice (22 Nos),House Wiring Boards (6 Nos),Arc Welding Machine (200A),Bench Grinder,Files (Smooth & Hard) (16 Nos) Anvils (3 Nos),Power Blower,Tools Box (7 Nos),Tin Cutter (13 Nos),Vernier Calipers (2 Nos),Wood Rasp File (20 Nos)	1,07,495.00
2.	B.Tech – ME	Material Science & Engg lab	Hydraulic Semi-Automatic Mounting Press (3 Ton Capacity),Belt Surface Grinder,Double Disc Polisher,Hand Polishing Stand,Heat treatment Furnace 10000 C (6X6X12) (Muffle furnace) Quenching Machine,Specimen Cut-Off Machine (2 HP), Trinacular Metallurgical Microscope (2 Nos),Material plus software,Binocular Metallurgical Microscope (7 Nos) Binocular Metallurgical Microscope (3 Nos),Double disc polisher	4,54,550.00
3.	B.Tech – ME	Manufacturing Technology lab	Sand Rammer (2 Nos),Permeability Meter,Universal Strength Machine (Hydraulic),Hydraulic Press,Blow Moulding Machine,Injection Moulding Machine,Spot Welding Machine,Combined Machine for ARC & TIG Welding,Electronic Balance,Sand Tester,Sand Shiver,Hardness Test,TIG Welding Equipments Plasma Welding Machine,Brazing Machine,Press Tool	7,34,600.00
4.	B.Tech – ME	Thermal Engg Lab	Cut model 2- Stroke Single Cylinder Petrol Engine Test Rig,4-Stroke Slow Speed Diesel Engine Test Rig,2- Stroke Single Cylinder Petrol Engine(AC Generator Loading) 4-Stroke Three Cylinder Petrol Engine Test Rig,Cut Section 4-Stroke Single Cylinder Diesel Engine,2- Stage Air compression Test Rig	5,07,000.00
5.	B.Tech – ME	Heat Transfer lab	Thermal Conductivity of Insulation Powder,Thermal Conductivity of Composite Walls,Natural Convection Apparatus,Heat Transfer Through Pin-Fin Apparatus Heat Transfer Through Forced Convection Apparatus,Emissivity Measurement Apparatus,,Parallel/Counter Flow Heat Exchanger,Stefan – Boltzmann Apparatus Thermal Conductivity of Metal Rod,Lagged Pipe Apparatus	3,97,500.00
6.	B.Tech – ME	Fluid Mechanics & Hydraulic machinery lab	Impact of Jet on Vanes,Centrifugal Pump Test Rig(Single Stage) With 1 Hp DC Motor & Control,Centrifugal Pump Test Rig(Multi Stage) With 1 Hp DC Motor & Control Reciprocating Test Rig With DC Motor,Venturi & Orifice meter Test Rig,Pipe Friction Apparatus,Loss of Head due to Contraction Apparatus Pelton Turbine Test Rig,Francis Turbine,Orifice & Mouth Pieces Setup with all Standard	8,10,830.00

			Accessories,Notch Apparatus with all Standard Bernoulli's Theorem Setup With all Standard Apparatus,Hydraulic Pump Test Apparatus	
7.	B.Tech – ME	Machine Tools lab	Lathe Machine (5 Nos),Radial Drilling Machine,ShaperUniversal Milling Machine,SlottingMachine,Grinding Machine,Surface Grinding Machine Advanced Surface Grinding Machine,Planning Machine	14,19,405.00
8.	B.Tech – ME M.Tech – PE & ED	CAD/CAM lab Design Simulation lab Manufacturing simulation lab	CNC (PC Controlled) Including Tooling, Milling and Lathe machines, Package,Computers (55 Nos),CATIA V5 Discover 10 User Pack,PROE	26,07,228.00
9.	B.Tech – ME	Measurement lab	Calibration of Pressure Gauge,Calibration of Transducer For Temperature Measurement,Study And Calibration of LVDT Transducer For Displacement Measurement Calibration of Strain Gauge Force Measurement,Calibration of Thermocouple For Temperature Measurement,Calibration of Capacitive Transducer For Angular Displacement Study And Calibration of Photo And Magnetic Speed Pickups For The Measurement,Calibration of Resistance Temperature Detector For Temperature Measurement Study And Use of Seismic Pickup For The Measurement of Vibration of Engine,Study and Calibration of Mclead Gauge for Low Pressure Rotometer Range:0.5-1lpm-Float 304SS PVC Conical-Scale Length;85mm, 125mm	2,55,200.00
10.	B.Tech – ME	Metrology lab	Tool Maker Microscope,Vernier Caliper (2 Nos),Vernier Height Gauge,Bevel Protractor (2 Nos),Sine Bar (2 Nos),Gear Tooth Vernier CaliperDial Bore Gauge(2 Nos)Sprit Level (2 Nos),Slip Gauges Set,Outside Micrometer 0-25,Out Side Micrometer 25-50,Jaw -Type Inside Micrometer 0-25Jaw -Type Inside Micrometer 25-50,Granite Surface Plate,Floating Carriage Micrometer,Tally Surf	3,38,249.00

Laboratories (Department wise for PG):

a) Consolidated details of existing laboratories

S.No	Name of the course* with Branch	Name of the Laboratory	Equipment	Quantity	Cost
1.	<i>M.Tech</i>	Advance Simulation Lab	Laptops, Server with high-end capacity	36	3800000

HoD

Principal