

**ANNAMACHARYA INSTITUTE OF TECHNOLOGY AND SCIENCES::TIRUPATI
(AUTONOMOUS)**

4.1.1 Infrastructure and physical facilities

CLASSROOMS

S.no	Department	Room ID	Building Block
1	CIVIL	AG03	A BLCOK
2	CIVIL	A101	A BLCOK
3	CIVIL	A103	A BLCOK
4	CIVIL	A104	A BLCOK
5	CIVIL	A105	A BLCOK
6	CIVIL	A108	A BLCOK
7	CSE	A201	A BLCOK
8	CSE	A203	A BLCOK
9	CSE	A204	A BLCOK
10	CSE	A205	A BLCOK
11	CSE	A208	A BLCOK
12	CSE	A301	A BLCOK
13	CSE	A304	A BLCOK
14	CSE	A305	A BLCOK
15	CSE	A306	A BLCOK
16	CSE	A308	A BLCOK
17	CSE	C403	C BLOCK
18	CSE	C404	C BLOCK
19	CSE	C405	C BLOCK
20	CSE	C408	C BLOCK
21	ECE	C103	C BLOCK
22	ECE	C104	C BLOCK
23	ECE	C105	C BLOCK
24	ECE	C108	C BLOCK
25	ECE	C203	C BLOCK
26	ECE	C204	C BLOCK
27	ECE	C205	C BLOCK
28	ECE	B301	B BLOCK
29	ECE	B302	B BLOCK
30	EEE	C303	C BLOCK
31	EEE	C304	C BLOCK
32	EEE	C305	C BLOCK
33	EEE	C308	C BLOCK
34	HBS	A401	A BLCOK
35	HBS	A404	A BLCOK
36	HBS	A405	A BLCOK
37	HBS	A406	A BLCOK
38	HBS	A408	A BLCOK
39	HBS	A409	A BLCOK
40	HBS	A411	A BLCOK
41	HBS	B401	B BLOCK
42	HBS	B402	B BLOCK

43	HBS	B403	B BLOCK
44	HBS	B404	B BLOCK
45	HBS	B405	B BLOCK
46	HBS	B406	B BLOCK
47	HBS	B407	B BLOCK
48	HBS	B408	B BLOCK
49	MBA	C409	C BLOCK
50	MBA	C410	C BLOCK
51	MCA	B409	B BLOCK
52	MCA	B410	B BLOCK
53	MEC	A309	A BLCOK
54	MEC	A311	A BLCOK
55	MEC	B303	B BLOCK
56	MEC	B304	B BLOCK

Drawing Halls

S.no	Department	Room id	Building Block
1	CIVIL	A109	A BLCOK
2	MEC	B306	B BLOCK

Seminar Halls

S.no	Room id	Building Block	Type of faculties
1	BG06	B BLOCK	LCD Projectors, Audio system, wi-fi
2	B104	B BLOCK	LCD Projectors, Audio system, wi-fi
3	C 401	C BLOCK	Digital Interactive Panel, Audio system, wi-fi

Conference Halls

S.no	Room id	Building Block	Type of faculties
1	B105	B BLOCK	LCD Projectors, Audio system, wi-fi
2	B309	B BLOCK	LCD Projectors, wi fi

Department Office and staff Rooms

S.no	Department	Room id	Building Block
1	CIVIL	A102	A BLCOK
2	CIVIL	A106	A BLCOK
3	CIVIL	A107	A BLCOK
4	CSE	A202	A BLCOK
5	CSE	A206	A BLCOK
6	CSE	A207	A BLCOK
7	CSE	A302	A BLCOK
8	CSE	A303	A BLCOK
9	ECE	C106	C BLOCK

10	ECE	C107	C BLOCK
11	ECE	C206	C BLOCK
12	EEE	C306	C BLOCK
13	EEE	C307	C BLOCK
14	HBS	A402	A BLCOK
15	HBS	A403	A BLCOK
16	HBS	A407	A BLCOK
17	HBS	A410	A BLCOK
18	MBA	C406	C BLOCK
19	MBA	C407	C BLOCK
20	MEC	A307	A BLCOK


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VENKATAPURAM (VIII.)
RENIGUNTA (M), TIRUPATI-517 520

Laboratories Details

Department of Civil Engineering

Name of Laboratory : SOIL MECHANICS LAB

Room ID:CG05

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

Name of Laboratory : STRENGTH OF MATERIALS LAB

Room ID:AG07

S.No	Name of Major Equipment	Quantity
1	Cantilever beam apparatus	1
2	Compression testing machine (CTM)	1
3	Fixed beam apparatus	1
4	Impact testing machine	1
5	Rockwell cum brinell hardness tester	1
6	Resistance strain gauges (electronic)	1
7	Spring testing machine	1
8	Simply supported beam (SSB)	1
9	Torsion testing machine	1
10	Uniform bending apparatus	1
11	Universal testing machine (UTM)	1

Name of Laboratory : SURVEYING LAB

Room ID:AG06

S.No	Name of Major Equipment	Quantity
1	Measuring chains 30m	10 No's
2	Cross staff 100mm	12 No's
3	Prismatic compass	10 No's
4	Plane table set	10 No's
5	Levelling staff 4m	10 No's
6	Automatic level	1
7	Dumpy level	10 No's

8	Digital planimeter	1
10	Box sextant	1
12	Theodolites	10 No's
13	Total station	2 No's

Name of Laboratory : **TRANSPORTATION ENGINEERING LAB**

Room ID:AG04

S.No	Name of Major Equipment	Quantity
1	Measuring chains 30m	10 No's
2	Cross staff 100mm	12 No's
3	Prismatic compass	10 No's
4	Plane table set	10 No's
5	Levelling staff 4m	10 No's
6	Automatic level	1
7	Dumpy level	10 No's
8	Digital planimeter	1
9	Box sextant	1
10	Theodolites	10 No's
11	Total station	2 No's

Name of Laboratory : **TRANSPORTATION ENGINEERING LAB**

Room ID:AG04

S.No	Name of Major Equipment	Quantity
1	Apparatus for aggregate crushing test	1
2	Aggregate impact testing machine	1
3	Pycnometers	6 No's
4	Los angles abrasion test machine	1
5	Deval's attrition test machine	1
6	Length and elongation gauges	1
7	Bitumen penetration test setup	1
8	Bitumen ductility test setup	1
9	Ring and ball apparatus	1
10	Penskey – Marten's apparatus	1

Name of Laboratory : **ENVIRONMENTAL ENGINEERING LAB**

Room ID:AG05

S.No	Name of Major Equipment	Quantity
1	pH meter	1
2	Turbidity meter	1
3	Conductivity meter	1
4	Hot air oven	1
5	Muffle furnace	1
6	Dissolved oxygen meter	1
7	Reflux apparatus	1
8	Jar test apparatus	1
9	BOD incubator	1
10	U.V. Visible spectrometer	1
11	Water bath	1
12	COD Extraction apparatus	1

Name of Laboratory : **ENGINEERING GEOLOGY LAB**

Room ID:AG10

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

Name of Laboratory : **CONCRETE TECHNOLOGY LAB**

Room ID:SHED1

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


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Department of Computer science and Engineering

Name of Laboratory: **A-Block VINT CERF Lab**

Room ID: **A209**

S.No	Name of Equipment	Quantity
1.	Computers: (80 No's M70 series Lenovo S500 Desktops Pentium I3 processor, Intel H81 Chipset, 4GB DDR4, 1TB SATA, "19.5" LED Display, USB Keyboard, USB Mouse.)	80
2	Air-conditioners	02
3	Ups(20KVA)	01

Name of Laboratory: **B-Block GOSLING Lab**

Room ID: **B 201**

S.No	Name of Equipment	Quantity
1.	Computers(113 No's 3597 AH4 Lenovo Desktops, Intel Pentium G630,G-41 Express Chipset, 2GB DD3 RAM(150 No's)8GB DDR3(80 No's) 250GB SATA, "15.6" LED Display, USB keyboard, USB Mouse)	113
2	Projector	01
3	Projector Screen	01
4	Air-conditioners	02
5	UPS(External-Online)30KVA with 65AH Batteries	01
6	Internet Broad Band Modem	01
7	LAN Switches	06
8	LAN Wall Mount	01
9	Head sets	30

Name of Laboratory: **B-Block RITCHIE Lab**

Room ID: **B 202**

S.No	Name of Equipment	Quantity
1.	Computers(118 No's 3597 AH4 Lenovo Desktops, Intel Pentium G630,G-41 Express Chipset, 2GB DD3 RAM(150 No's)8GB DDR3(80 No's) 250GB SATA, "15.6" LED Display, USB keyboard, USB Mouse)	113
2	Projector	01
3	Projector Screen	01
4	Air-conditioners	02
5	UPS(External-Online)30KVA with 65AH Batteries	01
6	Internet Broad Band Modem	01
7	LAN Switches	06
8	LAN Wall Mount	01
9	Head sets	30

Name of Laboratory: **C-Block TIM BERNERS LEE Lab**

Room ID:C 209

S. No	Name of Equipment	Quantity
1.	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),	55
2.	Air-conditioners	02
3.	UPS(External-Online)30KVA with 65AH Batteries	01
4.	Ups 30 KVA	01
5.	LAN Switches	1
6.	Printer(Dot Matrix)	01

Name of Laboratory: **C-Block AHO ULLMAN Lab**

Room ID:C 209

S. No	Name of Equipment	Quantity
1.	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),	55
2.	Air-conditioners	02
3.	LAN Switches	04

Name of Laboratory: **D- Lab JOHN MCCARTHY Lab**

Room ID:C 101

S. No	Name of Equipment	Quantity
1.	HP280G6 Desktop : Core-i5 -10500,16GB DDR4 RAM,1TB HDD ,18.5 TFT Monitor ,USB mouse and USB Key Board	75
2.	Projector LCD	1
3.	Projector Screen	1
4.	Air-conditioners	04
5.	LAN Switches	04
6.	Ups(20KVA)	1

Name of Laboratory:**E- Lab JEOFEREY HINTON Lab**

Room ID:C 301

S. No	Name of Equipment	Quantity
1.	LENOVA Think Center Neo 50t Desktop : Core-i5 -12400,8GB DDR 4 RAM,1TB HDD ,22 TFT Monitor ,USB mouse and USB Key Board	75
2.	Projector LCD	1
3.	Projector Screen	1
4.	LAN Switches	04
5.	Ups(20KVA)	1

Name of Laboratory: **CM's Skill Excellence Center**Room ID: **A111**

S. No	Name of Equipment	Quantity
1.	AcerLaptopTMP249-G2-M2 : Core-i5 -7 th GenProcessor 8GB RAM,1TB HDD , Monitor ,USB	37
2.	LENOVA Desktop Neo 50s G3 : Core-i3 ,8GB RAM,1TB HDD , 21.5 TFT Monitor , Keyboard and Mouse	10
3.	Projectors LCD	1
4.	Projector Screen	1
5.	LAN Switches	02

Department of Electronics and Communications Engineering

Name of Laboratory: **Electronic Devices and Circuits Lab**Room ID: **C310**

S.No	Name of the Equipment	Quantity
1	CRO	12
2	DMM	15
3	Bread board trainer kit	8
4	Servo controlled voltage stabilizer	1
5	Function Generators	20
6	Kits for ECA lab	14
7	Regulated Power Supply	12
8	Decade resistance box	6
9	Decade inductance box	6
10	Decade capacitance box	6
11	Ac milli voltmeters	3
12	Analog ammeters	56
13	Voltmeters	28
14	Rheostats	12

Name of Laboratory: **IC APPLICATIONS LAB**Room ID: **C309**

S.No	Name of the Equipment	Quantity
1	Cathode Ray Oscilloscope	18
2	Oscilloscope Probes	20
3	Function Generator	18
4	Regulated Power Supply	13
5	IC Regulated Power supply	3
6	Bread Board Trainer System	7

7	Decade Resistance Box	5
8	Decade Inductance Box	5
9	Decade Capacitance Box	5
10	Linear IC Tester	1
11	Digital Multimeters	7
12	Ammeters	7
13	Voltmeters	6
14	Rheostats	4
15	ASLK Pro Kits	12
16	Servo Controlled Voltage Stabilizer	1
17	Bistable Multivibrator Kit	2
18	Monostable Multivibrator Kit	2

Name of Laboratory: Signal Processing and VLSI Lab

Room ID:C109

S.No	Name of the Equipment	Quantity
1	D-Link 24 Port Switch	3
2	20kva Ups System with Dc Power Pack	1
3	Xilinx9.2 Ise With Trainer Kits	24 USERS & 1 KIT
4	DSP Trainer Kits	3
5	Computers	67
6	MATLAB 8.2	30 USERS
7	Multisim Software	05 USERS
8	Plagarism Detector	1
9	Computer	1
10	12v 65ah Quanta VRLA/SMF Battery	20
11	DSP Starter Kit	5
12	CRO	8
13	Function Generators	8
14	RPS	8
15	CRO Probes	10
16	IoT Lab Kits(Set of 30 Items)	20
17	TIVA Launch Pad(15) Pot Meter+Wires(15) Boost XL-Senshub(5) ULN Driver Board(15)	50
18	Raspberry Pi(8)	8
19	SD card	10
20	Power adapter	10
21	HDMI Cable	10
22	Card Reader	10
23	BMP 180 Pressure Sensor	1
24	LDR Sensor Module	1
25	Ultrasonic Sensor	1
26	Gyro MP6050	1
27	GPS	1
28	Flame Sensor	1

29	Soil moisture Sensor	1
30	Air quality Sensor	1
31	Water Quality	1
32	Pulse Oximeter	1
33	BP Sensor	1
34	Web camera	1
35	Connecting wires	1

Name of Laboratory: Microprocessors and Microcontrollers Lab

Room ID:C110

S.No	Name of the Equipment	Quantity
1	HP 280G6 desktopp(corei5-8Gb DDR4,1TB HDD,19.5TFT)	30
2	Computers (Core 2 Duo 2.4 GHz Processor, 1GB RAM, 320GB HDD)	27
3	8086 Microprocessor kit with Power Supply Adapters, TASM and MASM	9
4	8051 Microcontrollers kit with Power Supply Adapters	7
5	8255 Study Cards	8
6	8259 Study Cards	8
7	8251 Study Cards	8
8	Traffic Light Controller Interface	2
9	8279 Study Card	8
10	Elevator Interface	2
11	ADC Interface	8
12	Dual DAC Interface	8
13	NEXSYS 3 Spartan 6 FPGA Board	1
14	MSP 430 Launch Pad, Booster, Experimenter Board and DC Motors and Embedded System kitsMSP430FR5969	15
15	ALS-SDA-86ME Micro Processor trainer kit	16
16	ALS-SDA-51ME Micro Controller Trainer Kit	16
17	RS 232 -9 Pin DB Connector	32
18	26 FRC Cables	16
19	56 FRC Cables	16
20	USB to Serial Converters	32
21	ALS-SDA CPLD/FPGA Universal trainer Kit	1

Name of Laboratory: Analog and Digital Communications Lab and MWOC Lab Room ID:C201

S.No	Name of the Equipment	Quantity
1	Microwave Test Benches with Klystron Source	6
2	Microwave Gunn Source	4
3	Optical Communications Kits	8
4	Cathode Ray Oscilloscopes	4
5	Analog Communications Kits	10
6	Analog Communications Kits	2
7	Analog Communications Kits	8
8	Analog Communications Kits	3

9	Cathode Ray Oscilloscopes	7
10	Oscilloscopes Connectors	10
11	Digital Communication Kits	5
12	Dual DC Regulated Power Supplies	3
13	Function Generators	6
14	Digital Multimeters	3
15	DC Kits	5
16	AC Kits	6

Name of Laboratory: UNMANNED AERIAL VECHICLE (UAV) Lab Room ID:BG02

S.No	Name of the Equipment	Quantity
1	FPV Quadcopter Drone 2.0 MP, WiFi, 720p, 120 degree wide angle camera	1
2	SYMA X5SW Quad copter 0.3 MP, RTF, WiFi Headless Mode, 6- Axis 360 degree	1
3	Plastic Quad copter with Propulsion Kit	1
4	1080p FPV Insight 5G 100mW HDMI Wireless Video Transmitter	1
5	Micro Quadcopter YH Equipment with 720p camera, Remote Control	1
6	Sensors	1
7	RC Flight Simulator	1
8	Precision Hawk Tool Set	1
9	Miscellaneous Components Connectors, Cables, Wire, Soldering Iron, Plugs, Screws, Bolts, Nuts, and Adhesives	10


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Department of Electrical and Electronics Engineering

Name of the laboratory: **Control systems and simulation lab** Room ID: **CG04**

S.NO	NAME OF THE EQUIPMENT	QUANTITY
1.	Characteristics of magnetic amplifier	1
2.	Time response of second order system	1
3.	Synchro transmitter receiver pair	1
4.	Characteristics of AC servo motor	1
5.	Lead and lag compensation of magnitude and phase plot	1
6.	Transfer function of dc motor	1
7.	Effect of P,PI,PID controller on a second order system	1
8.	Temperature controller using PID	1
9.	5 KVA servo stabilizer	1
10.	Decade resistance box	3
11.	Decade inductance box	2
12.	Decade capacitance box	2
13.	Programmable logic controller	1
14.	Effect of feedback on dc servo motor.	1
15.	CRO dual trace 30mhz	4
16.	CRO probes	8
17.	R load (50Ω/2A)	1

Name of the laboratory: **Power electronics & simulation lab** Room ID: **CG04**

S.NO	NAME OF THE EQUIPMENT	QUANTITY
1.	Study of characteristics of SCR, MOSFET, IGBT	1
2.	Gate firing circuits of SCR's	1
3.	Single phase ac voltage controller with R and RL loads	1
4.	Single phase fully controlled bridge converter with R and RLloads	1
5.	Forced commutation circuits for SCR	1
6.	Dc jones chopper with R and RL load	1
7.	Single phase cycloconverter with R and RL load	1
8.	Single phase series inverter with R and RL load	1
9.	5 KVA Servo Stabilizer	1
10.	Single phase center tapped transformer	1
11.	Single phase isolation transformer	2
12.	RPS 30V/2A	2
13.	Rheostat :50 ohms/2A	3
14.	Rheostat :150 ohms/5A	3
15.	INDUCTOR,0-150mH/5A	1
16.	INDUCTOR,0-150mH/2A	2
17.	Three phase isolation transformer	1
18.	Single Phase Parallel Inverter with R & RL Loads	1
19.	Three phase half controlled bridge converter firing &	1

	power unit	
20.	Single Phase Half Controlled Bridge Converter with FIRING & POWER UNIT	1
21.	Single phase dual converter trainer kit	1
22.	Using TPS7A4901 and TPS7A8300, Study kit	1
23.	Study of DC-DC Buck converter TPS54160 study unit	1
24.	WEBENCH experiments	1
25.	Multi meters	1
26.	Pot (10 ohms 50w, 100w, 50w)	1
27.	Rps 30v/4a	1
28.	Rheostats-200 Ω /1.5A, 10 Ω /3A	1

Name of the laboratory: **Electrical Measurements Lab**

Room ID: **CG03**

S.No.	Name Of Equipment/ Machinery	Quantity
1	Calibration and Testing of Single Phase Energy Meter	1
2	Calibration of Dynamometer Power Factor Meter	1
3	Crompton D.C. Potentiometer – Calibration of PMMC Ammeter and PMMC Voltmeter.	1
4	Kelvin's Double Bridge – Measurement of Resistance – Determination of Tolerance.	1
5	Measurement of % Ratio Error and Phase Angle of Given C.T. by Comparison.	1
6	Schering Bridge & Anderson Bridge.	1
7	Measurement of 3 Phase Reactive Power with Single-Phase Wattmeter.	1
8	Measurement of Parameters of a Choke Coil Using 3 Voltmeter and 3 Ammeter Methods.	1
9	Calibration LPF Wattmeter – by Phantom Testing	1
10	LVDT and Capacitance Pickup – Characteristics and Calibration	1
11.	Ammeter MI(0- 10A)	4
12.	Ammeter MI(0- 5/10A)	3
13.	3- ϕ auto transformer	2
14.	1- ϕ auto transformer	5
15.	Ammeter MI(0- 10A)	2
16.	HEAD PHONES	2
17.	1- ϕ Resistive load	3
18.	3- ϕ Resistive load	1
19.	1- ϕ Power factor meter	1
20.	RPS(0-30V)	1
21.	Strain Gauge	1
22.	Dielectric Oil Testing	1
23.	1- ϕ Auto Transformer	1

Name of the laboratory: **Power systems and simulation**

Room ID:BG01

S.NO	NAME OF THE EQUIPMENT	QUANTITY
1.	3 PHASE ALTERNATORS (3KVA,3 ϕ ,Y,415V)	1
2.	3 PHASE ALTERNATORS (5KVA,3 ϕ ,Y,415V)	1
3.	MOTORS(5HP,220V,1500RPM) DC SHUNT MOTOR	1
4.	Rheostat :300 Ohms/2A	1
5.	CT CONTROL TOOL BOX 9.9	5
6.	SL SIMULINK 8.5	5
7.	SS SIMSCOPE 3.13	5
8.	PS SIM POWER SYSTEMS 5.8	5
9.	3- ϕ auto transformer (415V/470V), 10A	3
10.	1- ϕ TRANSFORMER (230V/270V) , (10A)	1
12.	1- ϕ TRANSFORMER (230V/270V) , (5A)	1
13.	3 WINDING TRANSFORMER (2KVA)	1
14.	TACHOMETER	1
15.	3 POINT STARTER	1
16.	Transmission Line Model Kit	2
17.	DC VOLTMETER (0-300)V	1
18.	AC VOLTMETER (0-300)V	4
19.	WATTMETER LPF 300V/10A	2
20.	AC POWER SUPPLY PANEL	3
21.	DC AMMETER (0-20)A	1
22.	AC AMMETER (0-2)A	2
23.	AC AMMETER (0-5)A	5
24.	AC AMMETER (0-10)A	3

Name of the laboratory: **Electrical circuits and simulation Lab**

Room ID:BG01

S.NO	NAME OF THE EQUIPMENT	QUANTITY
1.	DIGITALMULTI METERS	10
2.	DUAL DC RPS	10
3.	DC VOLTMETERS (0-30V)	6
4.	DC AMMETERS(0-100mA)	6
5.	AC AMMETER(0-10A)	2
6.	AC VOLTMETERS (0-600V)	3
7.	BREAD BOARDS	13
8.	FUNCTION GENERATOR	3
9.	EXTERNAL HARD DRIVE (1 TB)	1
10.	Decade Resistance Box	4

12.	Decade Inductance Box	4
13.	Decade Capacitance Box	4
14.	Milliman's theorem Kit	1
15.	Current locus diagram kit	1
16.	Three phase Variac 10A	1
17.	Three phase Variac 5A	1
18.	Three phase Resistive Load	1
19.	Constant K-Low pass & High pass filter Kit	1
20.	CRO with probes	5
21.	WATT METERS UPF 600V/10A	2
22.	WATT METERS LPF 300V/150,5A/2.5A	1
23.	Single phase Variac 270/10A	1

Name of the laboratory: **ELECTRICAL MACHINES-1 LAB**

Room ID:CG08

S.NO	NAME OF THE EQUIPMENT	QUANTITY
1.	Ammeter –(0-1/2)A-MC	18
2.	Ammeter –(0-10/20)A-MC	20
3.	Brake test on DC shunt motor. Determination of performance curves.	1
4.	Brake test on DC compound motor. Determination of performance curves	1
5.	BAKELITE SHEET	6
6.	DPST SWITCHESES	6
7.	Fields test on DC series machines. Determination of efficiency.	1
8.	Load test on DC shunt generator. Determination of characteristics	1
9.	Load test on DC series generator. Determination of characteristics.	1
10.	Load test on DC compound generator. Determination of characteristics.	1
12.	Magnetization characteristics of DC shunt generator. Determination of critical field resistance and critical speed.	1
13.	Rheostats-(0-100Ω/5A)	6
14.	Rheostats-(0-1200Ω/0.6A)	1
15.	Rheostats-(0--750Ω/1.2A)	4
16.	Rheostats-(0--110Ω/1.2A)	2
17.	Resistive Loads- single phase 2.5KW,10A/220V	2
18.	Resistive Loads- single phase 5KW,20A/230V	2
19.	Swinburne's test and speed control of DC shunt motor. Predetermination of efficiencies.	1
20.	TWO POINT STARTERS	1
21.	THREE POINT STARTERS	4

22	FOUR PONIT STARTERS	2
23	Tachometers	4
24	Retardation test on DC shunt machines.	1
25	Separations of losses in DC shunt motor.	1
26	Voltmeters-(0-150/300)V-MC	10
27	Voltmeters-(0-300/600)V-MC	2
28	Rheostats-(0-50Ω/5A)	4

Name of the laboratory: **ELECTRICAL MACHINES-II LAB**

Room ID: **CG01**

S.NO	NAME OF THE EQUIPMENT	QUANTITY
1.	Ammeter - Moving Iron :(0-1A/2A)	5
2.	Ammeter - Moving Iron :0-10A/20A	10
3.	Ammeter - Moving coil :(0-1A/2A)	3
4.	Dc shunt motor coupled with salient pole alternator	1
5.	CLAMP METER	3
6.	DPST SWITCHES	2
7.	1-φ induction motor	1
8.	1-φ AUTO TRANSFORMER	7
9.	3-φ AUTO TRANSFORMER	4
10.	3-φ INDUCTION MOTOR	1
12.	AC GENERATOR COUPLED WITH DC MOTOR	1
13.	Rheostat :1200 Ohms/0.6A	1
14.	Rheostat :370 Ohms/1.7A	3
15.	Rheostat :470 Ohms/1.2A	3
16.	Rheostat :50 Ohms/2A	2
17.	Rheostat :150 Ohms/5A	1
18	1-φ RESISTIVE LOAD(10A)	2
19	1-φ RESISTIVE LOAD(20A)	4
20	SYNCHRONOUS MOTOR	1
21	SPST SWITCH	2
22	1-φ TRANSFORMER(2KVA)	9
23	1-φ TRANSFORMER(3KVA)	2
24	TACHOMETERS	3
25	BATCH PIN RED	250
26	BATCH PIN BLACK	250
27	BAKELET SHEET	3
28	Voltmeters-(0-150/300)V-MI	3
29	Voltmeters-(0-300/600)V-MI	9
30	Voltmeters-(0-75/150/300)V-MI	3

31	WATT METER LPF 0.2 LAG 75/150/300V,1/2A	2
32	WATT METER UPF 300/600V,5/10A	7
33	Voltmeters-(0-300)V-MC	1

Department of Mechanical Engineering

Name of the Laboratory: **Machine Tools LAB**

Room ID: **AG01**

S.No.	Name of the Equipment	Quantity
1	LATHE MACHINE	5
2	RADIAL DRILLING MACHINE	1
3	SHAPER	1
4	UNIVERSAL MILLING MACHINE	1
5	SLOTING MACHINE	1
6	GRINDING MACHINE	1
7	SURFACE GRINDING MACHINE	1

Name of the Laboratory: **Thermal Engineering LAB**

Room ID: **AG09**

S.No.	Name of the Equipment	Quantity
1	CUTTING SECTION MODEL TWO STROKE	1
2	CUTTING SECTION MODEL FOUR STROKE	1
3	DIESEL ENGINE TEST RIG	1
4	MULTI CYLINDER PETROL ENGINE	1
5	TWO STROKE PETROL ENGINE TEST RIG	1
6	TWO STROKE RECIPROCATING AIR COMPRESSOR	1
7	FOUR STROKE DIESEL ENGINE ASSEMBLING & DISASSEMBLING	1

Name of the Laboratory: **Manufacturing Technology LAB**

Room ID: **BG03**

S.No.	Name of the Equipment	Quantity
1	SPOT WELDING MACHINE	1
2	COMBINED TIG WELDING AND ARC WELDING MACHINE	1
3	PLASMA WELDING MACHINE	1
4	BRAZING MACHINE	1
5	INJECTION MOLDING MACHINE	1
6	HYDRAULIC PRESS	1
7	BLOW MOLDING MACHINE	1
8	ELECTRONIC BALANCE	1
9	SAND RAMMER	1
10	UNIVERSAL STRENGTH MACHINE	1
11	PERMEABILITY METER	1
12	SAND TESTER	1
13	SAND SHIVER	1
14	HARDNESS TESTER	1
15	PRESS TOOL	1
16	BLOW FURNACE	1

Name of the Laboratory: **Engineering workshop**Room ID: **CG09**

S.No.	Name of the Equipment	Quantity
1	BENCH VICE	14
2	CARPENTER VICE	11
3	VICES IN TIN SMITHY	3
4	HOUSE WIRING BOARDS	6
5	ARC WELDING MACHINE (200A)	1

Name of the Laboratory: **DASSAULT Lab**Room ID: **B305**

S.No.	Name of the Equipment	Quantity
1	HP HIGH-END LAPTOPS	26
2	PROJECTOR	1
3	COMPUTER	1

Name of the Laboratory: **CAD/CAM Lab**Room ID: **B307**

S.No.	Name of the Equipment	Quantity
1	CNC XLTURN MACHINE	1
2	CNC XLMILL MACHINE	1
3	COMPUTERS	55
4	HP LASERJET 1020 PLUS PRINTER	1
5	PROJECTOR	1
6	PROJECTOR SCREEN	1
7	DELTA UPS 20KV	1

Name of the Laboratory: **Fluid Mechanics and Hydraulic Machinery**Room ID: **D102**

S.No.	Name of the Equipment	Quantity
1	IMPACT OF JET ON VANES	1
2	LOSS OF HEAD DUE TO PIPE FRICTION	1
3	LOSS OF HEAD DUE TO SUDDEN CONTRACTION	1
4	SINGLE STAGE CENTRIFUGAL PUMP	1
5	MULTI STAGE CENTRIFUGAL PUMP	1
6	RECIPROCATING PUMP	1
7	CALIBRATION OF VENTURE METER & ORIFICE METER	1
8	PELTON WHEEL	1
9	FRANCIS TURBINE	1
10	FLOW THROUGH MOUTH PIECE	1
11	NOTCH APPARATUS WITH ALL STANDARD	1
12	BERNOULLI'S APPARATUS	1

Name of the Laboratory: **Heat Transfer Lab**Room ID: **D201**

S.No.	Name of the Equipment	Quantity
1	TEST ON EMISSIVITY APPARATUS	1
2	FORCED CONVECTION APPARATUS	1
3	HEAT CONVECTION THROUGH COMPOSITE WALLS	1
4	THERMAL CONDUCTIVITY OF INSULATION POWDER	1
5	LAGGED PIPE APPARATUS	1

6	NATURAL CONVECTION	1
7	TEST ON PIN –FIN APPARTUS	1
8	STEFAN – BOLTZMANN APPARATUS	1
9	THERMAL CONOUCTIVITY OF METAL ROD	1
10	TEST ON HEAT EXCHANGERS	1

Name of the Laboratory: **Material Science Lab/Crystal Structure Lab** Room ID: **D203**

S.No.	Name of the Equipment	Quantity
1	BINOCULAR MICRO SCOPES (CO-AXIAL & LIECA)	10
2	HYDRAULIC SEMI-AUTOMATIC MOUNTING PRESS (3 TON CAPACITY)	1
3	SPECIMEN BOX	1
4	HAND POLISHING STAND	1
5	8"DOUBLE DISC POLISHER.	1
6	BELT SURFACE GRINDER	1
7	SPECIMEN CUT-OFF MACHINE (2.HP)	1
8	HEAT TREATMENT FURNACE 10000 C (6X6X12) (MUFFLE FURNACE)	1
9	JOMINY QUENCHING MACHINE.	1
10	TRINOCULAR METALLURGICAL MICROSCOPE	2

Name of the Laboratory: **Metrology and Measurement Lab** Room ID: **D204**

S.No.	Name of the Equipment	Quantity
1	TOOL MAKER MICROSCOPE	1
2	VERNIER CALIPER	2
3	VERNIER HIGHT GAUGE	1
4	BEVEL PROTRACTOR	2
5	SINE BAR	2
6	GEAR TOOTH VERNIER CALIPER	1
7	DIAL BORE GAUGE	2
8	SPRIT LEVEL	2
9	SLIP GAUGES SET	1
10	OUTSIDE MICROMETER 0-25	1
11	OUT SIDE MICROMETER 25-50	1
12	JAW -TYPE INSIDE MICROMETER 0-25	1
13	JAW -TYPE INSIDE MICROMETER 25-50	1
14	GRANITE SURFACE PLATE	1
15	FLOATING CARRIAGE MICROMETER	1
16	TALLY SURF	1
17	CALIBRATION OF PRESSURE GAUGE	1
18	CALIBRATION OF TRANSDUCER FOR TEMPERATURE MEASUREMENT	1
19	STUDY AND CALIBRATION OF LVDT TRANSDUCER FOR DISPLACEMENT MEASUREMENT	1
20	CALIBRATION OF STRAIN GAUGE FORCE MEASUREMENT	1
21	CALIBRATION OF THERMOCOUPLE FOR	1

	TEMPERATURE MEASUREMENT	
22	CALIBRATION OF CAPACITIVE TRANSDUCER FOR ANGULAR DISPLACEMENT	1
23	STUDY AND CALIBRATION OF PHOTO AND MAGNETIC SPEED PICK-UPS FOR THE MEASUREMENT	1
24	CALIBRATION OF RESISTANCE TEMPERATURE DETECTOR FOR TEMPERATURE MEASUREMENT	1
25	STUDY AND USE OF SEISMIC PICK-UP FOR THE MEASUREMENT OF VIBRATION OF ENGINE	1
26	STUDY AND CALIBRATION OF MCLEAD GAUGE FOR LOW PRESSURE	1
27	ROTOMETER RANGE : 0.5 – 11 PM –FLOAT 304 SS PVC CONICAL-SCALE LENGTH : 85 MM, 125 MM	1

Department of Humanities and Basic Science

Name of the Laboratory: **Applied Physics Lab&Engineering Physics Lab** Room No: **BG04**

S.No	Name of Equipment	Quantity
1.	Stewart and Gee's kit	8
2.	Travelling Microscope	9
3.	Newton's Ring apparatus	5
4.	Spectrometer	8
5.	Fiber optic trainer kit	3
6.	Energy gap of a semiconductor diode kit	5
7.	Hall effect kit	3
8.	B-H trailer kit	4
9.	Cathode Oscilloscope (CRO)	4
10.	He-Ne Laser source	3
11.	Magnetic Stirrer	2
12.	Battery Eliminators	4
13.	Digital PH meter	2
14.	Ultrasonic velocity- acoustic grating kit	2
15.	Strain gauge (temperature) sensor kit	3
16.	RC circuit trainer kit with digital meter	5
17.	Pressure optical fiber sensor kit	3
18.	Spring constant kit	4
19.	Thermister kit	3

Name of the Laboratory: **Chemistry & Engineering Chemistry Lab** Room No: **BG05**

S.No	Name of Equipment	Quantity
1.	Analytical Balance	6
2.	Conductivity Bridge	11
3.	Colorimeter	2
4.	Red Wood Viscometer 1&2	7+7
5.	Bomb Calorimeter	1
6.	Digital pH Meter	8
7.	Digital Potentiometer	9

8.	Digital Electronic Balance	2
9.	Photo Calorimeter	9

Name of the Laboratory: **Communicative English Lab**

Room No: **C207**

S.No	Name of Equipment	Quantity
1.	Desktops	66
2.	Software	66
3.	Headphones	63
4.	Sound Amplifier	1
5.	Hand mikes	2
6.	Air-Conditioners(2 ton Capacity)	4
7.	Projector	1
8.	Wall mount speakers	4
9.	White marker board	1
10.	Network Components: Switches (24 ports)	3
11.	Wall Rack (9V Rack)	1


PRINCIPAL
ANNAMACHARYA INSTITUTE OF
TECHNOLOGY & SCIENCES
VENKATAPURAM (VIII.)
RENIGUNTA (M), TIRUPATI-517 520

Common Facilities

S.no	Room id	Building Block	Room Type
1	B201	B BLOCK	Computer Center-I
2	B202	B BLOCK	Computer Center-II
3	B203	B BLOCK	LIBRARY
4	B103	B BLOCK	EXAM SACTION
5	B308	B BLOCK	PLACEMENT CELL
6	B106	B BLOCK	PRINCIPAL ROOM
7	BG07	B BLOCK	AUDITORIUM
8	B102	B BLOCK	OFFICE
9	B107	B BLOCK	DINING HALL
10	B108	B BLOCK	IQAC CELL
11	B109	B BLOCK	BOARD ROOM
12	B101	B BLOCK	VISITOR HALL
13	CAT1	CANTEEN BLOCK	CANTEEN

Computing Facilities

Computers Details

Description	Quantity
Total Computer Systems	959
Computer for students	920

List of Application Software

S. No	Name of the Software	License /Freeware	License No/Source of Download
1	MS Office Professional 2007	Licensed	PH2DC-M4943-VCX86-K899T-RHQRM
2	MS Office Professional 2010	Licensed	MFRDT-7TTCC-WC79K-2VXR7-6VQRC
3	MS Office Professional 2013	Licensed	4FP2D-7NCQM-7HY68-TH6PY-VQTXY
4	Multimedia English Language Lab Software	Licensed	K-Van Software
5	Advanced English Communication Lab Software	Licensed	K-Van Software
6	RAD STUDIO C++	Licensed	M Soft,hyderabad
7	Oracle Database 12c	Licensed	M Soft,hyderabad
8	XILINX Vivado V2014 Version System Edition	Licensed	Professional Advanced Electronics
9	Matlab R2014b	Licensed	Capricot Technologies Pvt.Ltd
10	MultiSim V13	Licensed	Trident TechlabsPvt Ltd
11	Code Composer Studio	Licensed	Starcom Information Technology Limited
12	CATIA V5 Discover	Licensed	Capricot Technologies Pvt.Ltd
13	STAAD pro CAD software	Licensed	Synergic Information Solutions
14	Tally ERP .9 Multi User	Licensed	Asset Intigratedinfosystems
15	Borland C++	Licensed	Accord Solutions

16.	Microsoft Visual Studio 2010	Licensed	Microsoft platinum Campus agreement
17	Microsoft SQL Server 2008	Licensed	Microsoft platinum Campus agreement
18	Total Library Software System	Licensed	Total IT Software Solution PVT Ltd
19	Apache HTTP Server	Freeware	http://mirror.fibergrid.in/apache/
20	Apache Tomcat Server	Freeware	http://tomcat.apache.org/download-80.cgi
21	Business Intelligence Tool	Freeware	http://www.pentaho.com/
22	Postgresql Database	Freeware	http://www.postgresql.org/
23	Open Office	Freeware	http://www.openoffice.org/
24	Microsoft Small Basic	Freeware	http://www.freewarefiles.com/downloads_counter.php?programid=50216
25	Eclipse SDK 3.4.2	Freeware	http://www.eclipse.org/downloads/index.php
26	Java SE Development Kit (JDK) 7	Freeware	https://jdk7.dev.java.net/
27	Netbeans 6.8	Freeware	http://netbeans.org/downloads/index.html
28	Python 3.1.2	Freeware	http://www.freewarefiles.com/Python_program_15798.html
29	GIMP for Windows	Freeware	http://gimp-win.sourceforge.net/stable.html
30	UML Tool	Freeware	http://staruml.io/download
31	MySQL Server	Freeware	http://www.soft32.com/download_972.html
32	English Thesaurus and Grammar	Freeware	http://wordweb.info/free/
33	Globus Toolkit for grid	Freeware	http://toolkit.globus.org/toolkit/
34	Examination Software	License	Smart Brainy Software solution ,Hyd
35	OpenNN	Freeware	https://www.opennn.net/download/
36	RapidMiner	Freeware	https://docs.rapidminer.com/9.9/studio/installation/
37	Orange (software)	Freeware	https://orangedatamining.com/download/#windows
38	Weka	Freeware	https://sourceforge.net/projects/weka/
39	OpenCV	Freeware	https://sourceforge.net/projects/opencvlibrary/
40	ML.NET	Freeware	https://sourceforge.net/projects/m-learning-for-net.mirror/
41	pandas (software)	Freeware	https://sourceforge.net/projects/pandas.mirror/
42	Deeplearning4j	Freeware	https://jar-download.com/artifact-search/deeplearning4j-core
43	Neural Lab	Freeware	https://neurallab.software.informer.com/4.0/
44	OpenNN	Freeware	https://www.opennn.net/download/
45	PhotoRec	Freeware	https://www.bleepingcomputer.com/download/photorec/
46	MyDLP	Freeware	https://mydlp.software.informer.com/0.8/
47	Cyberduck	Freeware	https://cyberduck.io/download/
48	ApexKB	Freeware	https://sourceforge.net/projects/jumper/
49	Lucene	Freeware	https://lucene.apache.org/core/downloads.html

List of System Software

S. No	Name of the Software	License /Freeware	License No/Source of Download
1.	Windows7 Professional	Licensed	TRTM-TH2W-DYRMX-6FC48-4Q6VM
2.	Windows 8 Professional	Licensed	9F69N-6H6J6-KVC42-9XHCV-4CWX2
3.	Windows Vista Enterprise	Licensed	MMWQF-MYYF9-FJF9G-G7KXB-G3PKY
4.	Windows XP Professional X64 Ed	Licensed	D74CH-6WR43-CYKVH-PJYBF-WFTCJ
5.	Windows XP Professional	Licensed	F9BRV-DT7DX-Q3WHV-7WFCX-JK8RQ
6.	Windows Server 2003 R2, X32 Ed.	Licensed	JWK44-RP3MR-XMJ4D-X96GM-2G9WQ
7.	Windows Server Standard 2008 R2	Licensed	BC2FX-TH8XQ-2KCPX-4MTGG-T3BJF
8.	Red Hat Linux	Licensed	M Soft, Hyderabad
9.	Ubuntu Linux 11.0 Server	Freeware	

Campus Wi-Fi Facility

S.No	Place of installation	Access points
1	College Compus	Unifi access points (20 No's)
2	Boys Hostel	Unifi access points (6 No's)
2	Girls Hostel	Unifi access points (6 No's)

Jio Wi-Fi Net available with speed of 200Mbps in College Campus, Boys Hostel and Girls hostel
Internet Security: Kerio Control 7.2 internet security fire wall and Microtek Router Firewall

Internet Facility

S.No	Provider name	Available Bandwidth
1	HYFY GIGA FIBRE PRIVATE LTD (1:1 DEDICATED LINE)	1 Gbps
2	BSNL BROAD BAND	40Mbps
Total Bandwidth		1.04Gbps