

Department of Aeronautical Engineering

AERODYNAMICS LABORATORY

LIST OF EQUIPMENTS(2019)

S.NO	DESCRIPTION OF ITEM	QTY
1.	WATER FLOW CHANNEL WITH DIFFERENT MODELS	1
2.	HELE-SHAW APPARTAUS	1
3.	SUBSONIC WIND TUNNEL WITH AEROFOIL AND CYLINDER MODELS	1
4.	WIND TUNNEL STRAIN GUAGE 6 COMPONENT BALANCE	1
5.	32 CHANNEL ELECTRONIC PRESSURE SCANNER WITH TRANSDUCERS	1

PROPULSION LAB (INCHARGE)

HOD (AERO)

Department of Aeronautical Engineering

AERO CAD LABORATORY

LIST OF EQUIPMENTS (2019)

S.NO	DESCRIPTION OF ITEM	QTY
1	ACER COMPUTER CORE i5 6 th GEN	30
2.	ACER COMPUTER CORE i5 (4 th GEN)	1
3.	LASERJET PRINTER (HP 1020)	1
4	HP LASERJET PRINTER (PRO MFPM 126 NW)	1
SOFTWARES		
1	AUTOCAD 2016	30
2	SOLID WORKS ACADEMIC	30
3	ANSYS ACADEMIC	30

AERO CAD LAB (INCHARGE)

HOD (AERO)

Department of Aeronautical Engineering

PROPULSION LABORATORY

LIST OF EQUIPMENTS(2019)

S.NO	DESCRIPTION OF ITEM	QTY
1	BOMB CALORIMETER WITH EXTERNAL CALIBRATOR	1
2	FREE AND FORCED CONVECTIVE HEAT SET UP	1
3	FREE AND WALL JET SET UP	1
4	PROPELLER PERFORMANCE TEST RIG	1
5	COMPRESSOR HP	2
6	STORAGE TANK (VERTICAL)	1
7	AFTER COOLER	1
8	SETTLING CHAMBER WITH ACCESSORIES	1
9	SHADOW GRAPH SET UP	1
10	PITOT TUBE WITH SCANNER	1
11	RAMJET FACILITY	1
12	SENENICH PROPELLER BLADES 72 INCHES	2
13	3D TRAVERSE MECHANISM	1
14	FIBRE OPTICAL LIGHT SOURCE	1
15	HEMISPHERICAL FLAME HOLDER	1

LAB IN CHARGE

HOD (AERO)

Department of Aeronautical Engineering

AIRFRAME AND AERO ENGINE LABORATORY

LIST OF EQUIPMENTS(2019)

S.NO	DESCRIPTION OF ITEM	QTY
1	LYCOMING 4 CYLINDER PISTON ENGINE (CESSNA AC)	1
2	DRILLING MACHINE (PILLAR)	1
3	BENCH GRINDING MACHINE	1
4	AIR COMPRESSOR (SINGLE CYLINDER)	1
5	PNUEMATIC RIVETTER	1
6	SHEAR CUTTER PEDESTAL	1
7	BENCH VICE	8
8	TIG WELDING MACHINE	1
9	MIG WELDING MACHINE	1
10	GOBLIN ENGINE (TURBO PROP)	1
11	TURBOJET ENGINE (LEARJET)	2
12	AVCO LYCOMING ENGINES	1
13	AVCO LYCOMING ENGINES	1
14	FLOW CHECK DEFECTOSCOPE	1
15	ROTAX 4 CYLINDER ENGINE	1
16	ROTAX 2 CYLINDER ENGINE	1
17	LYCOMING ENGINE	1
18	TA-12A-APU OLD SCRAP ENGINE	1

LAB IN CHARGE

HOD (AERO)

Department of Aeronautical Engineering

AIRCRAFT STRUCTURES LABORATORY

LIST OF EQUIPMENTS 2019

S.NO	DESCRIPTION OF ITEM	QTY
1	Beam deflection with dial guage	1
2	Column testing apparatus	1
3	Dial guage with base stand	4
4	Dial guage 0-10 mm	4
5	Vernier caliper 8"	1
6	Combined loading setup	1
7	Shear centre for open section	1
8	shear centre for closed section	1
9	Unsymmetrical bending of z section	1
10	Cantilever Beam setup	1
11	Wagner beam, tension beam setup	1
12	Experimental setup Hinged bar suspended by two wires	1
13	Setup for Vibration of Beams	1
14	Setup for vibration of Beams	1
15	Deflection of beams	1
16	Truss and frame model	1
17	COLUMN Testing Rig	1
18	Photo elastic apparatus	1
19	Universal Testing Machine100KN	1

LAB INCHARGE

HOD (AERO)

Department of Aeronautical Engineering

AVIONICS LABORATORY

LIST OF EQUIOPMENTS 2019

S.NO	DESCRIPTION OF ITEM	QTY
1.	Adder/Subtractor Binary kit	6
2.	Encoder kit	6
3.	Decoder kit	6
4.	Multiplexer kit	6
5.	Demultiplexer kit	6
6.	8085 Microprocessor kit	9
7.	8085 Microprocessor kit with 4 Keyboard	1
8.	Adder/subtractor kit	4
9.	Encoder Kit	4
10	Decoder Kit	4
11.	Multiplexer Kit	4
12.	De multiplexer Kit	4
13.	Timer kit	6
14.	Comprarator kit	6
15	4 Digit 7 Segment display card	3
16	Switches & LEDs card	3
17	16 Channel ADC card	6
18	Digital to Analog converter card	6
19	Cathode ray oscilloscope	3
20	Regulated power supply	9
21	MIL STD 1553-B CARD	2
22	Shift Register kit	6
23	Electronic design experiment	6

AVIONICS LAB (INCHARGE)

HOD (AERO)



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COLLEGE OF TECHNOLOGY



Department of Electronics & Communication Engineering

Major Equipments of Communication Systems Laboratory

Ref: CS-1909191-STK

19.09.19

No	Name of Equipment	Eqpt..No	Qty	Rate	Amount
1	Systems-PC	CS-PC-01-13	13	28,000	3,64,000
2	MSO (100)MHZ	CSC-MSO-01-04	4	71,563	2,86,252
3	CRO(20MHZ) Caddo 831	CS-CRO- 01- 02	2	17,500	35,000
4	CRO (60MHZ) SM410	CS-CRO-03	1	42,000	42,000
	CRO (30MHZ) SM410	CS-CRO-01-08	8	18,300	1,56,900
	DSO	CS-DSO-1-4	4	11,375	45,500
5	FG (1 MHZ) Caddo 4060C	CS-FG-01-02	2	6,900	13,800
6	FG (10MHZ) caddo4061	CS-FG-03-12	10	8,500	93,500
7	FG (20MHZ) 2219	CS-FG-13-16	4	-	-
9	Single RPS(0-30)V	CS-SRPS-01-07	7	5,200	41,600
10	Dual RPS(0-30)V	CS-DRPS-01-06	6	7,900	47,400
11	Dual Tracking Power Supply	CS-DPS-01-05	5	4,200	21,000
12	IC Regulated Power Supply	CS-DPS-06-09	4	3,200	12,800
13	Digital Logic Ic Trainer Kit	CS-DITK-O1-10	10	3,800	38,000
14	Digital Ic Trainer Kit	CS-DITK-11-23	13	4,100	53,300
15	PAM-PPM-PWM MODEM kit	CS-PTK-1-2	5	1,900	9,500
16	TDM-PAM MODEM Trainer ki	CS-TTK-1-2	2	9,500	19,000
17	TDM PCM Tx Rx kit	CS-TTK-1-2	4	10.500	42,000
18	Delta MODEM Kit	CS-DELTK-1-2	2	15,435	23,185
19	DSB/SSB AM Tx Kit	CS-AMDS/SSBTK-1-3	3	11,655	39,655
20	DSB/SSB AM Rx Kit	CS-AMDS/SSBRK-1-3	3	11,655	39,655



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Department of Electronics & Communication Engineering

No	Name of Equipment and Range	Eqpt.No	Qty	Rate (RS)	Amount (RS)
21	Data Formatting Modulation kit	CS-DFMK-1-4	4	11,250	45,000
22	Data Reformatting Demodulation kit	CS-DFDK-1-4	4	11,250	45,000
23	Freq Div Mux Demux kit	CS-FDMK-1-2	2	18,000	36,000
24	Freq Modem	CS-FMODK-1-2	2		
25	8 Bit variable generator	CS-BVG-1-2	2	3,500	7,000
26	AM Tx Rx Kit	CS-AMTRK-1-2	2	5,172	10,345
27	FM Tx Rx Kit	CS-FMTRK-1-2	2	5,172	10,345
28	Mc mic Charateristics	CS-MICC-1-2	2	6,250	12,500
29	Amplitude MODEM	CS-AMMOD-1-2	2	2,810	5,620
30	PSK MODEM	CS-PSKMOD-1-2	2	7,500	15,000
31	IC Power Supply	CS-PS-1	1	5,400	5,400
32	Spectrum Analyser	CS-SA-1	1	1,03,480	1,03,480
TOTAL					17,19,737

LAB INSTRUCTOR

LAB INCHARGE

HOD



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COLLEGE OF TECHNOLOGY



Department of Electronics & Communication Engineering

Major Equipments of EDC Laboratory

Ref: EDC-1909191-STK

19.09.19

No	Name of Equipment and Range	Make	Eqpt..No	Qty	Rate (RS)	Amount (RS)
1	Systems-PC	Acer	EDC-CPU-01-10	10	28,000	2,80,000
2	MSO (100)MHZ	Rigol	EDC-MSO-01-05	5	71,563	3,57,815
3	CRO(30MHZ) Caddo 831	Scientech	EDC-CRO- 01-09	9	21,800	1,96,200
4	CRO (30MHZ) SM410	Scientific	EDC-CRO-10-15	6	19,500	1,17,000
5	FG (1 MHZ) Caddo 4060C	Scientech	EDC-FG-01-03	3	6,900	20,700
6	FG (10MHZ) caddo4061	Scientech	EDC-FG-04-09	6	7,850	47,100
7	FG (3MHZ) JE-LCD217	Jayam/	EDC-FG-10-14	5	7,500	37,500
8	FG(25MHZ) AFG3022	Tektronix	EDC-FG-15	1	8,500	8,500
9	Single RPS(0-30)V	Intel	EDC-SRPS-01-07	7	6,800	47,600
10	Dual RPS(0-30)V	Scientech	EDC-DRPS-01-06	6	7,900	47,400
11	Dual RPS(0-30V)	Jayam	EDC-DRPS-07-15	9	5,400	48,600
12	Current Source (0-1000)mA	AIS	EDC-CS-01-02	2	7,500	15,000
TOTAL						12,23,415

LAB INSTRUCTOR

LAB INCHARGE

HEAD OF DEPARTMENT



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Department of Electronics & Communication Engineering

Major Equipments of LIC Laboratory

Ref: EDC-1909191-STK

19.09.19

No	Name of Equipment and Range	Eqpt.No	Qty	Rate	Amount
1	COMPUTER	LIC-PC-01-07	7	35,000	2,45,000
2	CRO 20 MHZ	LIC-CRO 01-02	2	18,300	36,600
3	CRO 50 MHZ	LIC CRO 03-05	3	19,500	58,500
4	CRO 30 MHZ	LIC CRO 06-10	5	18,300	91,500
5	CRO 30 MHZ	LIC CRO 11-16	6	18,300	1,09,800
6	FG 1 MHZ	LIC FG 01-05	5	6,900	34,500
7	FG 10 MHZ	LIC FG 06-07	2	8,750	17,500
8	FG 10 MHZ	LIC FG 08-17	10	12,850	1,28,500
9	SINGLE RPS (0-30 V)	LIC SRPS 01	1	4,500	4,500
10	SINGLE RPS (0-30 V)	LIC SRPS 02-03	2	4,500	9,000
11	DUAL RPS (0-30V)	LIC-DRPS-01-07	7	5,400	37,800
12	FIXED POWER SUPPLY (+/- 15 V)	LIC-FPS-01-10	10	2,160	21,600
13	DUAL FIXED POWER SUPPLY (+/- 5 V, 12 V)	LIC -DFPS- 11-14	4	3,500	14,000
14	DUAL FIXED POWER SUPPLY (+/- 5 V, 15 V)	LIC-DFPS-15	1	4,000	4,000
15	DUAL FIXED POWER SUPPLY (+/- 5 V, 12 V)	LIC -DFPS- 15-18	5	3,000	15,000
16	DIGITAL IC TRAINER KIT	LIC-DITK-O8-19	12	3,485	41,820
17	DIGITAL IC TRAINER KIT	LIC-DITK-20-24	5	4,950	24,750
18	LINEAR IC TRAINER KIT	LIC-LITK-01-02	2	11,200	22,400
19	IC TESTER	LIC-ICT-01-05	5	20,952	1,04,760
TOTAL					10,21,530

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Microprocessor and Microcontroller Lab

Major Equipment List

S No	Description	Qty	Rate	Value
1.	Computer System	10	35,000	3,50,000
2.	Microprocessor Trainer Kit - 8085	28	4,716	1,32,048
3.	Microprocessor Trainer Kit - 8086	39	6,877	2,68,203
4	Micro controller Trainer Kit - 8051	32	7,650	2,44,800
5	CRO	5	20880	104400

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Department of Electronics & Communication Engineering

REF : ECE-MECS-STK-19092019-01

19.09.2019

Major Equipments of ME-CS / Research Laboratory

S.No	Description of Item	Model	Qty	Rate(Rs)	Value (Rs)
1.	System	3GB RAM, 400GB HD	18	34,274	6,16,932
2.	Micro strip Component Trainer Kit	MCT	2	84,375	1,68,750
3.	Network Analyzer	2.5 Ghz, SW-2500	2	1,99,500	3,99,000
4.	Digital Phosphor Oscilloscope	2.5GS/S, 500MHz	1	8,66,670	8,66,670
5.	Digital Storage Oscilloscope	DS-1102CM	1	48,195	48,195
6.	Basic Antenna Trainer Kit	06VT/06VR	2	1,74,680	3,49,360
7.	GPS Trainer Kit	ST2276	2	89,250	1,78,500
8.	CDMA/DSS Trainer Kit	BCDMA	1	1,94,917	1,94,917
9.	Pulse Generator	1MHz	2	16,000	32,000
10.	Horn Antenna	-	2	3,675	7,350
11.	Digital Fiber Optics Link Trainer Kit	VOFT	2	14,285	28,570
12.	Matlab	R2011	5 user	5,24,055	5,24,055
13.	Matlab	R2013	10 user	2,65,110	2,65,110
Total					3679409

Lab Instructor

Lab In Charge

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Department of Electronics & Communication Engineering

Ref: LAB-1909019- STK

19 SEP 2019

Optical and Microwave Lab

Major Equipment

S.No	Description	Model	Qty	Rate (RS)
1	Micro wave power meter XPM 10	AMITEC Electronics-01	1	1,12,500
2	Benchmark SMC single mode fiber characteristic study setup Fiber optic power source (FOPS - 101)- 1 power supply (PSD -15) - 2 nos LD driver (FOSM-D6100) - 1 no Power meter FOPM 101E - 1 no	Benchmark	1 set	1,25,125
3	CRO(0-30Mhz)	Caddo	12	2,18,000
4	Fiber optic trainer kit	Scientific-06	8	2,46,030
5	Transmit/receive pair of NI USRP-2920,SDR Trainine system	Advantech Instruments	1	1,95,000
TOTAL				8,96,655

LAB INSTRUCTOR

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Department of Electronics & Communication Engineering

Stock List at DSP Lab as on 19 SEP 2019

Major Equipment

Sl.No	Description of Item	Model	Qty	Rate	Value
1	DSP Kit(TMS320-c33)	Vi Micro	5	28390	1,41,950
2	DCT-03 Data communication FALCON power supply DCT 03Trainer Kit	Falcon	2	53875	1,07,750
3	LAN Trainer kit	Falcon Vi Micro	7	62100	4,34,700
4	Math CAD Software	Premium 2001	1	200000	2,00,000
5	LSIM Software	-	3	100000	3,00,000
6	Mat lab Software (5 Licence)	Ver 7.0	2	113967	5,40,327
7	N SIM Software	-	1	100000	2,20,784
8	Orcad Software	Ver 10.5	1	420000	4,20,000
9	Xilinx Software	9.2i,8.1i	3	100000	3,00,000
10	Transistor Level Spice Modeling Tool	Ver 3.0	1	200000	2,00,000
11	Computer(New)	Acer	16	22,000	2,20,000
12	Computer(Old)	Acer	15	20,000	4,20,000
13	D3P Trainer Kit	Enthu	06	37,000	2,47,530
14	CRO	Sciencetech	07	20000	1,20,000
15	Analog Discovery 2 KIT – NI Edition	NI	10	30,000	3,00,000
TOTAL					14,07,750

LAB INSTRUCTOR

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Department of Electronics & Communication Engineering

REF : ECE-VLSI-STK-19092019-01

19.09.19

Major Equipments of VLSI & Embedded Laboratory

S.No	Description of Item	Model	Qty	Rate	Value
1.	System	3GB RAM, 400GB HD	10	34,274	3,77,014
2.	System	2GB RAM, 3 00GB HD	9	36,274	3,62,740
3.	System	2GB RAM, 500GB HD	13	34,274	4,45,562
4.	IBM Server	Intel Xenon E4405	1	1,07,692	1,07,692
5.	VLSI Trainer Kit	Spartan 3 (xc3s400, PQ208)	10	14,326.9	1,43,269
6.	VLSI Trainer Kit	Spartan 3 (xc3s400, PQ208)	5	20,884	1,04,420
7.	Arm7 Trainer Kit (Embedded) 1.LPC starter kit – 10 2.PWM LED Interface board – 1 3.Spartan 6 Project card – 1 4.Xbee RF Module – 10 5.IAR Software – 1CD	VSK – 2148		16,658.6	1,66,586
8.	Arm 9 Trainer Kit (Embedded)	Sciencetech 201	6	36,603	2,19,618
9.	Analog Devices DSP Kit	ADSP BF5xx	6	53,550	3,21,300
10.	Universal Development Board with virtex5 & cyclone2 kit	XC5VLX30	6	82,687	4,96,125
11.	DSO with Logic Analyser	RIGOL DS1052D	2	83,002	1,66,004
TOTAL					29,10,330

Lab In Charge

HOD

Department of Electrical and Electronics Engineering

S.NO	Name of the Equipment with brand name and specification	Name of the supplier	Total Cost	Year of Purchase
1	Power System Protection panels housing numeric Distance Protection relay, Transformer protection relay, Generator & motor Protection relay and Bus bar protection relay	GE T&D India Pvt Ltd	14,15,872	2018
2	DSPACE Control Desk	Dyna Fusion	6,05,570	2015
3	ETAP Software	ETAP Automation pvt ltd.	4,04,975	2016
4	Three phase Power Quality Analyser with Clamps - Megger make	Elmack Engineering Services	4,02,000	2018
5	SR motor driver with PIC/DSP controller -PEC16DSMO15	VI Micro Systems	1,42,860	2014
6	SCR based DC Motor Driver-0.5 Hp Synchronous generator coupled with 0.5 Hp DC Shunt motor	VI Micro Systems	1,27,000	2014
7	DSPIC 4011 Based 0.5 Hp BLDC motor with spring Balance load set up	VI Micro Systems	1,03,220	2014
8	Compound Generator with Coupled DC Motor	-	1,03,500	2000
9	Voltage and current sensor signal conditioner- UPS data acquisition system	VI Micro Systems	60,360	2014
10	UPS training module	VI Micro Systems	24,650	2018
11	Solar Application Kit – TI make	Starcom	50,000	2018



Department of Electrical and Electronics Engineering

12	C2000 Pcolo Kits – 10 Nos	Starcom	20,000	2018
13	Digital Clamp meter – Fluke make – 2 nos	Fluke	18,289	2018
14	LCR meter	EIMAKE Engg Services	28,639	2018
15	VFD- Variable frequency Drive	CDCE Automation	-	2018
16	Digital storage oscilloscopes – 10 nos	EIMAKE Engg Services	2,41,376	2016

Department of Civil Engineering

Infrastructure

Details of Laboratory with Equipment facilities

WILLIAM LAMBTON Surveying Laboratory

The objective of this laboratory is to learn about measurement of distances, angles, reduced levels and setting out works. The experiments include determination of distances using chain and tape, reduced levels and contours using level, bearing of lines using compass, horizontal and vertical angles using theodolite and graphical method using plane table. Use of modern equipment like total station will be demonstrated. This laboratory course will help the students to understand the theoretical concepts learned in the course surveying.

List of equipment:

1. Theodolite
2. Total station
3. GPS system
4. Plane table
5. Surveyor and Prismatic compass



Total station

Department of Civil Engineering



LARSEN & TOUBRO CADD Laboratory

The Larsen & Tubro CADD laboratory is named after the founders of famous construction industry L&T. The objective of this laboratory is to learn latest software such as Autocad, Staad.Pro, Revit Architecture and Revit Structure used in the field of civil engineering. Using Autocad-2D, architectural details of different types of buildings/structures shall be drawn and structural drawings shall be prepared with material specifications. AutoCAD 3D enhances drawing preparation in 3 dimensional rendered view. By using Staad.Pro software, the behavior of multistoried structures shall be analyzed for different types of loads and load combinations. In addition to that, design and detailing of structures also be done as per different codal recommendations. 3D rendered view with walkthrough, modelling of architectural and structural elements shall be done using the softwares Revit architecture and Revit Structures. On the above mentioned softwares Value Added Programs are being conducted for the students. The exercises carried out in CADD lab will develop the design skills in students and make the students more creative and the Value added courses lays a path for students to become a design engineer, Entrepreneur etc., in the construction industry.



Department of Civil Engineering

LEONHARD EULER Strength of Materials Laboratory

This laboratory provides knowledge on material's strength, stress, hardness and modulus of rigidity. The laboratory is equipped with key machines such as the Universal testing machine, Torsion testing, and Brinell hardness etc.

List of equipment:

1. Universal testing machine
2. Torsion testing machine
3. Brinell Hardness Testing Machine
4. Rockwell Hardness Testing Machine.
5. Impact testing machine
6. UTM with double shear chuck
7. Spring testing machine
8. Compression Testing machine



Universal testing machine with double shear chuck



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COLLEGE OF TECHNOLOGY



Department of Civil Engineering



Universal testing machine



Torsion testing machine

Department of Civil Engineering

DANIEL BERNOULLI Fluid Mechanics and Machinery Laboratory

The objective of this laboratory is to determine the various parameters related to fluid flow in pipes and in open channels and to study the characteristics of pumps and turbines. The experiments include determination of friction factor, minor loss coefficients, and coefficient of discharge of constriction meters, orifices, mouth pieces, notches and weirs, characteristics of flow profiles and hydraulic jump and characteristics of pumps and turbines and verification of momentum theorem. This laboratory course will help the students to understand the theoretical concepts learned in the courses fluid mechanics and open channel flow and hydraulic machinery.

KARL VON TERZAGHI Soil Mechanics Laboratory

The objective of Soil mechanics laboratory is to determine the physical and engineering properties of soil that are essential for the design of foundations. Physical properties include specific gravity, moisture content, density and consistency limits namely, liquid, plastic and shrinkage limits of soil. The engineering properties include permeability, consolidation, compressibility, shear strength and bearing capacity of soil. Testing of soil will increase the potential of the students to test the soil samples in the field conditions and interpret the results efficiently

List of equipment:

1. Hydrometer
2. Liquid and Plastic limit apparatus
3. Shrinkage limit apparatus
4. Proctor compaction apparatus
5. Unconfined Compression machine(UTM 20kN capacity)
6. Direct shear apparatus
7. Triaxial shear test apparatus
8. Soil permeability apparatus
9. Relative density apparatus
10. Infrared moisture meter



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Department of Civil Engineering



Triaxial shear test apparatus



One Dimensional Consolidation Testing Machine

Department of Civil Engineering



Unconfined Compression machine

JOSEPH ASPDIN Concrete and Highway Engineering Laboratory

Concrete Highway lab is designed to expose the students to the testing of construction materials. Some of the materials that can be tested in the lab include (i) Cement, (ii) Coarse Aggregates, (iii) Bitumen. The tests performed by the students include determination of specific gravity, fineness, normal consistency, setting times, workability and soundness of cement, fineness modulus of fine and coarse aggregate, strength of cement mortar, cement concrete and bricks, tensile test on steel rods, bending and flexural strength on concrete, bending test on wood, and non destructive test on concrete. The bitumen properties are also tested by the experiments such as tests for penetration, ductility, viscosity, softening point and flash and fire point for bitumen. The students will be able to infer the suitability of these materials for construction purpose.

List of Equipment:

1. Concrete mixer
2. Slump cone apparatus
3. Flow table apparatus
4. Vibrator
5. Compression testing machine

Department of Civil Engineering

6. V-bee consistometer
7. Aggregate impact testing machine
8. CBR apparatus
9. Blaine apparatus
10. Marshall stability apparatus
11. Flexural strength testing machine
12. Compaction factor apparatus
13. Ductility Testing machine
14. Bitumen penetration apparatus
15. Aggregate crushing value apparatus



Ductility testing Machine



Abrasion testing Machine



Compaction Factor Apparatus

Department of Civil Engineering

RACHEL CARSON Environmental Engineering Laboratory

Environmental Engineering Lab is well equipped with sophisticated equipments to characterise water and waste water quality. The lab is well equipped with equipments such as Gas Chromatography, Atomic absorption spectrophotometer, and flame photometer. The physical, chemical and biological characteristics of water and wastewater can be determined in this Lab. Apart from the conventional pollutants the presence of heavy metals, volatile organic compounds can also be tested in this Lab. The students also learn how to implement unit processes (sedimentation, filtration, flocculation/coagulation, and disinfection) to design water and wastewater treatment units.

List of Equipments:

1. Oxygen analyzer
2. UV Spectrophotometer
3. Ion selective electrode
4. Flame photometer
5. Gas chromatography
6. Atomic absorption spectrometer
7. BOD and COD analyzer
8. Digital conductivity meter
9. Jar test apparatus
10. pH-meter
11. Digital photo Calorimeter
12. Kjeldal digestion apparatus
13. Microscope
14. Jar tests apparatus



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Atomic absorption spectrometer



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KARAPAKKAM , CHENNAI – 97

INVENTORY LIST OF CAPITAL ITEMS - ANNEXURE I

DEPT: AUTOMOBILE ENGINEERING		NAME OF THE LAB: AUTOMOTIVE COMPONENTS LAB			
Sl.No	Item Description	Make	Model	Equipment Sl.No	Location /Lab Name
1	Royal Enfield Engine model cut model	Royal Enfield		KCT/AE/AUC/01	Mother Terasa Block / Automotive components Lab
2	Maruthi Engine cut model	Maruthi		KCT/AE/AUC/02	Mother Terasa Block / Automotive components Lab
3	Ambassdor Petrol Engine 4 Cylinder	Ambassdor		KCT/AE/AUC/03	Mother Terasa Block / Automotive components Lab
4	Perkins Diesel Engine 4 cylinder	Perkins		KCT/AE/AUC/04	Mother Terasa Block / Automotive components Lab
5	Injector tester			KCT/AE/AUC/05	Mother Terasa Block / Automotive components Lab
6	Diesel pump -Distributor type			KCT/AE/AUC/06	Mother Terasa Block / Automotive components Lab
7	Diesel pump-Inline type			KCT/AE/AUC/07	Mother Terasa Block / Automotive components Lab
8	Diffrential unit			KCT/AE/AUC/08	Mother Terasa Block / Automotive components Lab

9	Clutch assambly			KCT/AE/AUC/09	Mother Terasa Block / Automotive components Lab
10	Clutch assambly finger type			KCT/AE/AUC/10	Mother Terasa Block / Automotive components Lab
11	Clutch assembly (light)			KCT/AE/AUC/11	Mother Terasa Block / Automotive components Lab
12	Synchromesh gear box			KCT/AE/AUC/12	Mother Terasa Block / Automotive components Lab
13	Constamesh Gear			KCT/AE/AUC/13	Mother Terasa Block / Automotive components Lab
14	Gear ratio model			KCT/AE/AUC/14	Mother Terasa Block / Automotive components Lab
15	Dynamo			KCT/AE/AUC/15	Mother Terasa Block / Automotive components Lab
16	Alternator			KCT/AE/AUC/16	Mother Terasa Block / Automotive components Lab
17	Ignition coil			KCT/AE/AUC/17	Mother Terasa Block / Automotive components Lab
18	Distributor			KCT/AE/AUC/18	Mother Terasa Block / Automotive components Lab
19	Petrol Engine cut model			KCT/AE/AUC/19	Mother Terasa Block / Automotive components Lab

20	BMW Twin power turbo Engine	BMW		KCT/AE/AUC/20	Mother Terasa Block / Automotive components Lab
21	Transmission system(Benz)	Benz		KCT/AE/AUC/21	Mother Terasa Block / Automotive components Lab
22	Santro Engine	Santro		KCT/AE/AUC/22	Mother Terasa Block / Automotive components Lab
23	Intake manifold(santro)	Santro		KCT/AE/AUC/23	Mother Terasa Block / Automotive components Lab
24	Air filter(santro)	Santro		KCT/AE/AUC/24	Mother Terasa Block / Automotive components Lab
25	AC duct(santro)	Santro		KCT/AE/AUC/25	Mother Terasa Block / Automotive components Lab
26	Brake caliper(santro)	Santro		KCT/AE/AUC/26	Mother Terasa Block / Automotive components Lab
27	Radiator(santro)	Santro		KCT/AE/AUC/27	Mother Terasa Block / Automotive components Lab
28	Front stud(santro)	Santro		KCT/AE/AUC/28	Mother Terasa Block / Automotive components Lab
29	Self starter			KCT/AE/AUC/29	Mother Terasa Block / Automotive components Lab

30	Brake booster	Santro		KCT/AE/AUC/30	Mother Terasa Block / Automotive components Lab
31	AC compressor	Santro		KCT/AE/AUC/31	Mother Terasa Block / Automotive components Lab
32	ECU (Electronic control Unit)	Santro		KCT/AE/AUC/32	Mother Terasa Block / Automotive components Lab
33	Wiper motor			KCT/AE/AUC/33	Mother Terasa Block / Automotive components Lab
34	Bus Chassis	Ashok Leyland		KCT/AE/AUC/34	Mother Terasa Block / Automotive components Lab
35	Ritz car cut section	Ritz		KCT/AE/AUC/35	Mother Terasa Block / Automotive components Lab
36	Santro Skeleton	Santro		KCT/AE/AUC/36	Mother Terasa Block / Automotive components Lab
37	Rack and Pinion Steering Gear Box	Maruthi		KCT/AE/AUC/37	Mother Terasa Block / Automotive components Lab
38	Single Cylinder Dissel Engine			KCT/AE/AUC/38	Mother Terasa Block / Automotive components Lab



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COLLEGE OF TECHNOLOGY

KARAPAKKAM , CHENNAI – 97

INVENTORY LIST OF CAPITAL ITEMS - ANNEXURE I

DEPT: Automobile Engineering

NAME OF THE LAB: BOSCH

Sl.No	Item Description	Supplier	Model	Equipment Sl.No	Location /Lab Name
1	Assambly Sleeve Set	Bosch			Mother Teresa block/Bosch Lab
2	Assembly Kit	Bosch			Mother Teresa block/Bosch Lab
3	Tools 1	Bosch			Mother Teresa block/Bosch Lab
4	Tools 2	Bosch			Mother Teresa block/Bosch Lab
5	Tools 3	Bosch			Mother Teresa block/Bosch Lab
6	Regulating T-piece	Bosch			Mother Teresa block/Bosch Lab
7	Disassembly Tool	Bosch			Mother Teresa block/Bosch Lab
8	Disassembly Tool S	Bosch			Mother Teresa block/Bosch Lab
9	Mandrel	Bosch			Mother Teresa block/Bosch Lab

10	Mandrel 1	Bosch			Mother Teresa block/Bosch Lab
11	Crimping Tool-1	Bosch			Mother Teresa block/Bosch Lab
12	Bushing	Bosch			Mother Teresa block/Bosch Lab
13	Plate	Bosch			Mother Teresa block/Bosch Lab
14	Tools	Bosch			Mother Teresa block/Bosch Lab
15	Four wheel Battery Load test	Bosch			Mother Teresa block/Bosch Lab
16	Battery 4w application	Bosch			Mother Teresa block/Bosch Lab
17	Alternator 14v	Bosch			Mother Teresa block/Bosch Lab
18	Bosch Make Ac Recovery and Recharging Machine Model: ACS 261	Bosch			Mother Teresa block/Bosch Lab
19	Bosch make car engine scanner modl:KTS 590	Bosch			Mother Teresa block/Bosch Lab
20	Esi Software	Bosch			Mother Teresa block/Bosch Lab
21	Bosch make battery tester model: BAT 131	Bosch			Mother Teresa block/Bosch Lab
22	Bosch make battery charger model:BML 2415	Bosch			Mother Teresa block/Bosch Lab

23	Alternator 24v	Bosch			Mother Teresa block/Bosch Lab
24	Starter 12 v	Bosch			Mother Teresa block/Bosch Lab
25	Starter 24 v	Bosch			Mother Teresa block/Bosch Lab
26	Bosch make Auto electrical test bench-3 phase model: AETB-03	Bosch			Mother Teresa block/Bosch Lab
27	Ampere clamp	Bosch			Mother Teresa block/Bosch Lab
28	Test Oil	Bosch			Mother Teresa block/Bosch Lab
29	Holding Fixture	Bosch			Mother Teresa block/Bosch Lab
30	Test Equipment	Bosch			Mother Teresa block/Bosch Lab
31	Nozzle Tester	Bosch			Mother Teresa block/Bosch Lab
32	Car Simulator	Bosch			Mother Teresa block/Bosch Lab

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COLLEGE OF TECHNOLOGY

KARAPAKKAM , CHENNAI – 97

INVENTORY LIST OF CAPITAL ITEMS - ANNEXURE I

DEPT: AUTOMOBILE

NAME OF THE LAB: VEHICLE MAINTENANCE LAB

Sl.No	Item Description	Make	Model	Equipment Sl.No	Location /Lab Name
1	Two Post Lift Rhino 4HC	Rhino			Mother Teresa block/vehicle
2	Hyundai creta	Hyundai			Mother Teresa block/vehicle
3	Ford ecosports	Ford			Mother Teresa block/vehicle
4	Polaris sports car	Polaris			Mother Teresa block/vehicle
5	Honda CBR	Honda			Mother Teresa block/vehicle
6	Kawasaki Ninja	Kwasaki			Mother Teresa block/vehicle
7	Compressor				Mother Teresa block/vehicle
8	Nissan Micra Xtronic cvt xv	Renault Nissan			Mother Teresa block/vehicle

INVENTORY LIST OF CAPITAL ITEMS - ANNEXURE I

DEPT: AUTOMOBILRE

NAME OF THE LAB: AUTOMOTIVE FUELS AND LUBRICANTS LAB

Sl.No	Item Description	Supplier	Model	Equipment Sl.No	Location /Lab Name
1	Cleveland Flash Point and Fire Point	Tech-ED Equipment		KCT/AE/FL/01	Mother Teresa block/fuel lubrication
2	Aniline Point Apparatus	Tech-ED Equipment		KCT/AE/FL/02	Mother Teresa block/fuel lubrication
3	Ried Vapour Presssure Test Apparatus	Tech-ED Equipment		KCT/AE/FL/03	Mother Teresa block/fuel lubrication
4	Carbon Residue Apparatus	Tech-ED Equipment		KCT/AE/FL/04	Mother Teresa block/fuel lubrication
5	Copper Strip Corrosion Test Apparatus	Tech-ED Equipment		KCT/AE/FL/05	Mother Teresa block/fuel lubrication
6	Distillation Apparatus	Tech-ED Equipment		KCT/AE/FL/06	Mother Teresa block/fuel lubrication
7	Cloud and Pour Piont Apparatus	Tech-ED Equipment		KCT/AE/FL/07	Mother Teresa block/fuel lubrication
8	Red Wood Viscometer	Tech-ED Equipment		KCT/AE/FL/08	Mother Teresa block/fuel lubrication
9	Saybolt Viscometer	Tech-ED Equipment		KCT/AE/FL/09	Mother Teresa block/fuel lubrication
10	Drop point of Grease Apparatus	Tech-ED Equipment		KCT/AE/FL/10	Mother Teresa block/fuel lubrication
11	Penetrometer Apparatus	Tech-ED Equipment		KCT/AE/FL/11	Mother Teresa block/fuel lubrication
12	Apparatus for Determination of Calorific Value of fuels	Tech-ED Equipment		KCT/AE/FL/12	Mother Teresa block/fuel lubrication
13	Rectangular Muffle furnace	Tech-ED Equipment		KCT/AE/FL/13	Mother Teresa block/fuel lubrication
14	Junkers gas calorimeter	Tech-ED Equipment		KCT/AE/FL/14	Mother Teresa block/fuel lubrication

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**DETAILS OF STOCK VERIFICATION OF INVENTORY- KCG COLLEGE
OF TECHNOLOGY, CHENNAI**

DEPARTMENT: Mechanical Engineering

YEAR:2016-17

LABORATORY/SECTION: G-19/Thermal lab

SEMESTER: V

Sl. No	Item/ Equipment	Make	Model	Stock Sl.No	Cost in Rs	Year of Purchase
1	Four stoke petrol engine cut section model	Altech	Royal enfiled	KCT/ME/TE/PEC-01	12480.00	5.04.00
2	Two stoke petrol engine cut section model	almech	scocity	KCT/ME/TE/PEC-02	9989.00	28.07.00
3	Four stoke diesel engine cut section model	Altech	Kirlosker	KCT/ME/TE/DEC-03	12480.00	5.04.2000
4	Multi cylinder petrol engine test rig	Altech	Ambassador	KCT/ME/TE/PET 4c-04	144768.00	5.04.2000
5	Twin cylinder diesel test rig	Altech	H T C	KCT/ME/TE/DET 2c-05	116480.00	5.04.2000
6	Single cylinder diesel test rig	Altech	Anil	KCT/ME/TE/DET 1c-06	58240.00	5.04.2000
7	Electrical steam turbine test rig	Almech		KCT/ME/TE/ST -07	312600.00	16.09.02
8	Two stroke petrol test rig	Altech	Birla yamaga	KCT/ME/TE/PET-08	49920.00	5.04.00
9	Wind tunnel test rig	Almech		KCT/ME/TE/WT-09	152799.00	9.01.2002
10	Air conditioning test rig	Almech		KCT/ME/TE/A/C-10	101218.00	9.01.2002
11	Centrifugal blower test rig	Altech		KCT/ME/TE/CB-11	66560.00	5.04.2000
12	Cleave land flash&fire point apparatus	Almech		KCT/ME/TE/FFP-12	9812.00	9.01.2002
13	Two stage air compressor test rig	Altech		KCT/ME/TE/ACT-13	62400.00	5.04.2000

14	Universal say bolt viscometer	consolidated		KCT/ME/TE/SBV-14	6936.00	18.02.00
15	Or sat apparatus	consolidated		KCT/ME/TE/OA-15	8320.00	18.02.00
16	Vapor compression Refrigerator test rig	consolidated		KCT/ME/TE/REF-16	52000.00	18.12.2000
17	Red wood viscometer	consolidated		KCT/ME/TE/RWV-17	8857.00	11.08.2003
18	LPG Refrigerator test rig	In house project		KCT/ME/TE/LPG re-18	17400.00	
19	Data acquisition system with logger	Consolidated equipments		KCT/ME/TE/DAS-19	349125	01.03.17

DETAILS OF STOCK VERIFICATION OF INVENTORY- KCG COLLEGE OF TECHNOLOGY, CHENNAI

DEPARTMENT: Mechanical Engineering
YEAR:2016-17

Sl. No	Item/ Equipment	Make	Model	Stock Sl.No	Cost in Rs	Year of Purchase
1	Thermal conductivity of insulating material apparatus		Almech	KCT/ME/HT/01	32487.00	16.07.2001
2	Heat transfer through composite wall apparatus		Almech	KCT/ME/HT/02	33442.00	16.07.2001
3	Heat transfer from a pin fin apparatus		Almech	KCT/ME/HT/03	34918.00	16.07.2001
4	Heat transfer by natural convection apparatus		Almech	KCT/ME/HT/04	30498.00	16.07.2001
5	Heat transfer by forced convection apparatus		Almech	KCT/ME/HT/05	35183.20	16.07.2001
6	Emissivity measurement apparatus		Almech	KCT/ME/HT/06	28730.00	16.07.2001
7	Heat exchanger (parallel		Almech	KCT/ME/HT/07	30586.00	16.07.2001

	flow & counter flow) apparatus					
8	Stefan boltzman apparatus		Almech	KCT/ME/HT/08	33150.00	16.07.2001
9	Thermal conductivity by Guarded hot plate apparatus		Almech	KCT/ME/HT/09	37570.00	16.07.2001
10	Water cooling tower apparatus		Almech	KCT/ME/HT/010	57548.40	16.07.2001
11	Lagged pipe apparatus		Almech	KCT/ME/HT/11	21361.00	24.06.2004
12	Fluidised bed cooling tower		Almech	KCT/ME/HT/12	57750.00	30.09.2015

**LAB
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Heat**

Transfer Lab

SEMESTER: V

DETAILS OF STOCK VERIFICATION OF INVENTORY - KCG COLLEGE OF TECHNOLOGY

DEPARTMENT: - Mechanical Engineering

LABORATORY/SECTION: - Dynamics Lab/ G-54

SI No	Item/Equipment	Make	Model	Stock SI no	Cost in Rs	Year of Purchase
1	Vibration Lab	Madras Metallurgical services		KCT/ME/DY/09	65,137	27.02.2001
2	Static & Dynamic Balancing M/C	Madras Metallurgical services		KCT/ME/DY/10	18,134	27.02.2001
3	Whirling of Shaft Apparatus	Madras Metallurgical services		KCT/ME/DY/11	32,815	27.02.2001
4	Motorized Gyroscope	Madras Metallurgical services		KCT/ME/DY/12	21,280	27.02.2001
5	CAM Analysis M/c	Madras Metallurgical services		KCT/ME/DY/13	30,594	27.02.2001
6	Kinematics of Four Bar chain	Quality Quart Engineers		KCT/ME/DY/16	4,050	04.08.2003
7	Kinematics of Gear Trains	Quality Quart Engineers		KCT/ME/DY/17	4,320	04.08.2003
8	Kinematics of Universal Joints	Quality Quart Engineers		KCT/ME/DY/18	19,640	04.08.2003
9	Moment of Inertia by Oscillation	Quality Quart Engineers		KCT/ME/DY/20	14,400	04.08.2003
10	Universal Governor	Quality Quart Engineers		KCT/ME/DY/21	18,750	04.08.2003
11	Flywheel and Axle	BS Pyromatics		KCT/ME/DY/22	15,000	04.08.2003
12	Stroboscope	BS Pyromatics		KCT/ME/DY/23	10,697	23.03.2004
13	Balancing Reciprocating Masses	BS Pyromatics		KCT/ME/DY/24	39,600	05.11.2005
14	Transverse vibration Free	BS Pyromatics		KCT/ME/DY/25	8,600	05.11.2005

	Beam					
15	Multidegree freedom suspension	BS Pyromatics		KCT/ME/DY/26	16,000	05.11.2005
16	Vibration Pick ups	Ratna controls		KCT/ME/DY/27	24,748	29.11.2006
17	Dynamic Balancing M/C	Royal Quality Products		KCT/ME/DY/28	2,21,563	24.01.2011
18	Turn Table Apparatus	Quality Quart Engineers		KCT/ME/DY/19	26,640	04.08.2003
19	Vibrating Table Apparatus	Jehovah Jerah		KCT/ME/DY/	48,000	25/02/17

DETAILS OF STOCK VERIFICATION OF INVENTORY- KCG COLLEGE OF TECHNOLOGY

DEPARTMENT: - Mechanical Engineering

LABORATORY/SECTION: - Fluid Mechanics & Machinery Lab/ G-20

SI No	Item/Equipment	Make	Model	Stock SI no	Cost in Rs	Year of Purchase
1	Kaplan Turbine	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/KT/01	2,08,000	2000
2	Pelton Turbine	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/PT/01	1,20,640	2000
3	Francis Turbine	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/FT/01	1,33,120	2000
4	Centrifugal Pump[variable speed]	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/CPV/01	35,776	2000
5	Centrifugal Pump[constant speed]	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/CPC/01	26,624	2000

6	Reciprocating pump	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/RP/01	29,952	2000
7	Self priming pump	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/SPP/01	26,624	2000
8	Jet pump	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/JP/01	28,288	2000
9	Gear oil pump	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/GP/01	31,616	2000
10	Submersible pump	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/SP/01	44,686	2001
11	Orifice meter apparatus	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/OMA/01	29,952	2000
12	Venturimeter Apparatus	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/VMA/01	31,616	2000
13	Reynolds Apparatus	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/RA/01	26,624	2000
14	Minor losses in pipes	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/MLA/01	29,120	2000
15	Metacentric height apparatus	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/MA/01	13,312	2000
16	Bernoulli's Apparatus	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/BA/01	18,254	2002
17	Notch apparatus	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/NA/01	29,702	2001
18	Cut section model of pumps	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/CSM/01	17,238	2002
19	Turgo impulse turbine	Altech Coimbatore	Altech Coimbatore	KCT/ME/FM/TIT/01	92,998	2004
20	Rotameter			KCT/ME/FM/RM/01		
21	Dead weight pressure gauge tester			KCT/ME/FM/DWT/01		
22	Pitot tube Assembly	I MECH, Coimbatore	I MECH, Coimbatore	KCT/ME/FM/PTA/01	39,150	2012
23	Calibration of flow through Mouthpiece	I MECH, Coimbatore	I MECH, Coimbatore	KCT/ME/FM/MP/01	51,600	2012
24	Calibration of flow	I MECH,	I MECH,	KCT/ME/F	51,600	2012

	through Orifice tank	Coimbatore	Coimbatore	M/OM/01		
25	Multistage Centrifugal pump	I MECH, Coimbatore	I MECH, Coimbatore	KCT/ME/FM/MCP/01	84,250	2012
26	Flume Assembly- Open channel flow apparatus	I MECH, Coimbatore	I MECH, Coimbatore	KCT/ME/FM/OCF/01	1,15,800	2012

**DETAILS OF STOCK VERIFICATION OF INVENTORY- KCG COLLEGE OF TECHNOLOGY,
CHENNAI**

DEPARTMENT: Mechanical Engineering

LABORATORY/SECTION: Mechatronics Lab

Sl. No	Item/ Equipment	Make	Model	Stock Sl.No	Cost In Rs	Year Of Purchase
1	PLC –RTA Hydraulic linear actuation trainer	Vi micro systems	Vi	KCT/ME/M TS/E-01	1,89,655	2007
2	Basic level Electro pneumatic trainer	Vi micro systems	Vi	KCT/ME/M TS/E-02	85,100	2007
3	Basic Level Electro pneumatic trainer with PLC	Vi micro systems	Vi	KCT/ME/M TS/E-03	1,55,170	2007
4	Servo controller inter phasing for open loop and closed loop	Vi micro systems	Vi	KCT/ME/M TS/E-04	1,15,940	2007
5	8051 Micro controller	Vi micro systems	Vi	KCT/ME/M TS/E-05	8,810	2007
6	Digital PID Controller	Vi micro systems	Vi	KCT/ME/M TS/E-06	15,860	2007
7	Level controller trainer	Vi micro systems	Vi	KCT/ME/M TS/E-07		
8	Pressure process controller	Vi micro systems	Vi	KCT/ME/M TS/E-08		
9	Hydraulic simulation software			software	2,38,160	2007&2010
10	Pneumatic simulation software			software	2,34,160	2007&2010
11	Computer systems			12 Nos	Accounts maintained by CSE Dept	2007
12	8085 Microprocessor kit with LCD	Premtech Instruments		KCT/ME/M TS/E-09	5,000	2016

	and keyboard					
13	Stepper motor interface module	Premtech Instruments		KCT/ME/M TS/E-10	1400	2016
14	Traffic light controller interface module	Premtech Instruments		KCT/ME/M TS/E-11	1500	2016
15	Speed control of DC motor	Premtech Instruments		KCT/ME/M TS/E-12	1500	2016
16	Image processing system kit	Premtech Instruments		KCT/ME/M TS/E-13	68000	2016
17	8085 Microprocessor kit with LCD and keyboard	Tamilnadu Educational Instruments		KCT/ME/M TS/E-14	14160	2018

DEPARTMENT OF MECHANICAL ENGINEERING

DETAILS OF SPECIAL EQUIPMENTS USED FOR TRAINING, PROJECT WORK, RESEARCH & OTHER PURPOSES

DEPARTMENT: - Mechanical

LABORATORY/SECTION: - Research Lab/G-54

SI No	Item/Equipment	Make	Model	Stock SI no	Cost in Rs	Year of Purchase
1	Aluminium Stir casting Furnace with Hydraulic power pack	Swam equip,chennai		KCT/ME/R/01	7,00,000	17.08.2013
2	Slurry corrosion Erosion tester	Wear & friction, Chennai		KCT/ME/R/02	90,000	26.08.2013
3	Geared motor SK-62 NORD	NORD		KCT/ME/R/03		22.07.2015
4	Hot extrusion die with furnace with Hydraulic power pack	Swam equip,chennai		KCT/ME/R/04	6,87,115	10.03.2015
5	Computer controlled potentiostate Galvanostate & standard corrosion cell kit- AICTE FUNDED PROJECT	BIOLOGIC, Mumbai		KCT/ME/R/05	7,40,696	13.05.2014
6	Hydrogen Dual fuel Engine	Greaves		KCT/ME/R/06	7,00,000	Feb 2007

DETAILS OF STOCK VERIFICATION OF INVENTORY- KCG**COLLEGE OF TECHNOLOGY, CHENNAI****DEPARTMENT: Mechanical Engineering****LABORATORY/SECTION: Metrology**

Sl. No	Item/ Equipment	Make	Model	Stock Sl. No	Cost in Rs	Year of Purchase
1.	Vernier Caliper	Mitutoyo	B.S. Pyrometic India Pvt. Ltd	1	6595.68	2000
	Vernier Caliper	Mitutoyo	Taiyeby Machinery Store		3042.78	2000
	Vernier Caliper	Aerospace			Transferred from SOM Lab on	
2	Gear tooth vernier	M 1-26 (China)	B.S. Pyrometic India Pvt. Ltd	2	5591.04	2000
3	Outside micrometer	Mitutoyo	Associated Industrial Company	3	1554	2001
	Outside micrometer	Mitutoyo	Bombay Tools Centre		4893.75	2009
	Outside micrometer		B.S. Pyrometic India Pvt. Ltd		8299.20	2000
4	Depth micrometer	Mitutoyo	B.S. Pyrometic India Pvt. Ltd	4	4193.28	2000
5	Vernier height gauge	Aerospace	B.S. Pyrometic India Pvt. Ltd	5	8438.98	2000
	Vernier height gauge	Aerospace			Transferred from thermal lab	
6	Mechanical Comparator	Milhard	B.S. Pyrometic India Pvt. Ltd	6	3255.91	2000
	Pneumatic comparator	Accurate	B.S. Pyrometic India Pvt. Ltd		42194.88	2000
	Optical Comparator (Profile projector)	Metz	B.S. Pyrometic India Pvt. Ltd		51367.68	2000
7	Sine bar	Jumbo tools	Taiyeby Machinery Store	7	1461.60	2002
	Sine bar	Samrat	B.S. Pyrometic India Pvt. Ltd		2664.48	2000
8	Sine centre	Supreme	B.S. Pyrometic India Pvt. Ltd	8	10221.12	2000
9	Vernier bevel protractor	RSK	B.S. Pyrometic India Pvt. Ltd	9	9686.48	2000
10	Auto Collimator &		B.S. Pyrometic India Pvt. Ltd	10	137592	2000
11	Slip gauge	USSR KA2	Associated Industrial Company	11	7603.50	2001

	Slip gauge	USSR KA1	B.S. Pyrometic India Pvt. Ltd		13650	2000
12	Plug gauge	Omega	B.S. Pyrometic India Pvt. Ltd	12	2271.36	2000
13	Taper plug	Accurate	B.S. Pyrometic India Pvt. Ltd	13	2446.08	2000
14	Ring gauge	Omega	B.S. Pyrometic India Pvt. Ltd	14	1432.70	2000
15	Taper ring gauge		B.S. Pyrometic India Pvt. Ltd	15	4276.27	2000
16	Dial gauge	Mitutoyo	B.S. Pyrometic India Pvt. Ltd	16	4979.52	2000
	Dial gauge	Mitutoyo	Associated Industrial Company		1831.50	2001
	Dial gauge	Mitutoyo	Taiyeby Machinery Store		1444.80	2002
17	Surface plate (Cast Iron)		Taiyeby Machinery Store	17	3255.07	2000
	Surface plate (Granite)	GMT	B.S. Pyrometic India Pvt. Ltd		11474.74	2000
18	Try square	Bharath	Taiyeby Machinery Store	18	70.76	2000
	Try square	Bharath	Taiyeby Machinery Store		70.76	2000
19	Angle plate	Bharath	Taiyeby Machinery Store	19	4009.87	2000
20	Cylinder bore gauge	Mitutoyo	B.S. Pyrometic India Pvt. Ltd	20	5732.36	2000
21	Feeler gauge	Kastar	B.S. Pyrometic India Pvt. Ltd	21	611.52	2000
22	Magnetic V block	Milhard	B.S. Pyrometic India Pvt. Ltd	22	9686.48	2000
23	Magnetic base	Bharath	Taiyeby Machinery Store	23	1179.37	2000
	Magnetic base	Bharath	Taiyeby Machinery Store		940.80	2002
24	Tool makers microscope		B.S. Pyrometic India Pvt. Ltd	24	37590.15	2003
	Accessories		Madras Metallurgical Services Pvt. Ltd.		20059	2004
25	Electrical comparator	Sharp Techno System	Madras Metallurgical Services Pvt. Ltd.	25	16285	2004
26	Gear rolling tester	Kudalo Instrument s Pvt. Ltd	Madras Metallurgical Services Pvt. Ltd.	26	106680	2004
27	Floating carrage		B.S. Pyrometic India Pvt. Ltd	27	56235	2006
28	Vernier depth gauge	Mitutoyo	Madras Metallurgical Services Pvt. Ltd.	28	9450	2007

			Bombay Tools Centre		5200	2009
29	Strain gauge with indicator		Ratna Controls	29	18928	2011
30	Telescopic gauge		Bombay Tools Centre	30	3664	2015
31	Surface finish testing	Mitutoyo	Ratna Controls and Systems	31	172882	2015
32	Co ordinate Measuring M/c	SVP	Svp Laser Technologies	32	5,88,200	2017

**DETAILS OF STOCK VERIFICATION OF INVENTORY - KCG COLLEGE OF TECHNOLOGY,
CHENNAI**

DEPARTMENT: MECHANICAL ENGINEERING

LABORATORY/SECTION: STRENGTH OF MATERIALS LABORATORY

Sl. No	Item/ Equipment	Make	Model	Stock Sl.No	Cost in Rs	Year of Purchase
1	Compression testing machine	Hi TECH		KCT/ME/S M/EO1	206372.00	26.8.00
2	Torsion testing machine	Hi TECH		KCT/ME/S M/E.02	78457.00	20.6.00
3	Universal testing machine	Hi TECH		KCT/ME/S M/E.03	217137.24	20.6.00
4	Brinell Hardness testing Machine	HiTECH		KCT/ME /SM/E.04	28565.00	13.6.00
5	Rockwell Hard ness testing Machine	HiTECH		KCT/ME/S M/E.05	12554.00	31.3.00
6	IM PACT Testing machine	Hi TECH		KCT/ME/S M/ E.06	48476.00	13,6.00
7	SpringTestingMachine	HiTECH		KCT /ME/SM/E. 07	65008.00	31.7.00
8	Wood Testing	Hi TECH		KCT /ME/SM/E. 08	45224.00	26.8.00
9	Fatigue Testing	HiTECH		KCT /ME/SM/E. 09	45153	30.6.00
10	Erickson Testing Machines	HiTECH		KCT /ME/SM/E. 10	21944.00	30.6.00
11	Muffle Furnace	HiTECH		KCT /ME/SM/E. 11	11793.60	16.2.00
12	Metallurgy microscope	B.S.Pyrom atic india Pvt.Ltd		KCT /ME/SM/E.1 2	20005.00	16.2.00
13	Disc Polishing Machines	B.S.Pyrom atic india Pvt.Ltd		Kct /me/sm/E.13	13101.00	16.2.00
14	Jomny End Quenching	B.S.Pyrom atic india Pvt.Ltd		Kct /me/sm/E.14	14851.20	16.2.00
15	Specimen Cut-off Machine	B.S.Pyrom atic india Pvt.Ltd		Kct /me/sm/E.15	16161.00	16.2.00

16	Strain Gauge	B.S.Pyrom atic india Pvt.Ltd		Kct /me/sm/E.16	8736.00	16.2.00
17	Belt Grinding machine	B.S.Pyrom atic india Pvt.Ltd		Kct /me/sm/E.17	6464.64	16.2.00
18	Shore-D Hardness Testing	HiTECH		Kct /me/sm/E.1 8	9880.00	17.6.00
19	Beam Deflection Test Apparatus	HiTECH		Kct /me/sm/E.1 9	20000.00	21.12.12
20	Longitudinal compress meter	HiTECH		Kct /me/sm/E.2 0	13000.00	20.12.12
21	Dial gauge range 0.10mm. L.C.0.01mm	HiTECH		Kct /me/sm/E.2 1	5000	21.12.12
22	Le-Chatlier Apparatus	HiTECH		Kct /me/sm/E.2 2	11400	21.12.12
23	Mortar cupe moulds size. 70.6mmx70.6mmx70.6m m	HiTECH		Kct /me/sm/E.2 3	7000	21.12.12
24	Beam mould size.	HiTECH		Kct /me/sm/E.2 4	21000.00	30.1.13
25	Water bath size 300mmx250mmx100mm	HiTECH		Kct /me/sm/E.2 5	9500.00	21.12.13
26	Vicats apparatus	HiTECH		Kct /me/sm/E.2 6	18000	21.12.13
27	Cylindrical mould	HiTECH		Kct /me/sm/E.2 7	24000	21.12.13
28	Cube mould size 150mmx150mmx150mm	HiTECH		Kct /me/sm/E.2 8	7500	21.12.12
29	Rosette strain gauge.	HiTECH		Kct /me/sm/E.2 9	45000.00	30.8.13
30	Software for up gradation of existing UTM [CAPACITY 400KN]	SS INSTRUM ENTS		KCT/ME/S M/E.03[a]	1,33,800	25.01.18

KCG COLLEGE OF TECHNOLOGY

DETAILS OF STOCK VERIFICATION OF

INVENTORY

DEPARTMENT: Mechanical Engineering

LABORATORY/SECTION: Machine Shop

Sl. No	Item/ Equipment	Make	Model	Stock Sl.No	Cost In Rs	Year Of Purchase
1	Lathe	PL-4	4ft	KCT/ME/MS/L T/PL4-2	54096/-	10-4-2000
2	Lathe	PL-4	4ft	KCT/ME/MS/L T/PL4-3	54096/-	10-4-2000
3	Lathe	PL-4	4ft	KCT/ME/MS/L T/PL4-4	54096/-	10-4-2000
4	Lathe	PL-4	4ft	KCT/ME/MS/L T/PL4-5	54096/-	10-4-2000
5	Lathe	PL-4	4ft	KCT/ME/MS/L T/PL4-6	54250/-	9-11--2000
6	Lathe	PL-4	4ft	KCT/ME/MS/L T/PL4-7	54930/-	11-3-2000
7	Lathe	Anil lathe	4ft	KCT/ME/MS/L T/AL-01	79910/-	15-9-2000
8	Lathe	Anil lathe	4ft	KCT/ME/MS/L T/AL-02	79910/-	15-9-2000
9	Lathe	Padmi ni	4ft	KCT/ME/MS/L T/P1	86459/-	11-3-2000
10	Lathe	Padmi ni	4ft	KCT/ME/MS/L T/P2	86459/-	11-3-2000
11	Lathe	Padmi ni	4ft	KCT/ME/MS/L T/P3	86459/-	11-3-2000
12	Cyl grinding	Riat		KCT/ME/MS/ CG/01	278403/ -	29-4-2000
13	Bench grinder	Atlas		KCT/ME/MS/ BG-01	9800/-	29-4-2000
14	Shaping	Sagar	10"	KCT/ME/MS/ SM-01	69262/-	24-3-2000
15	Shaping	Sagar	18"	KCT/ME/MS/ SM-02	185810/ -	24-3-2000
16	Shaping	Sagar	12"	KCT/ME/MS/ SM-03	91450/-	4.3.2000
17	Capstan lathe	Noble	CL-25	KCT/ME/MS/ CL-01	73215/-	19.8.2000
18	Capstan lathe	Noble	CL-25	KCT/ME/MS/	100324/	4.8.2004

				CL-02	-	
19	Milling M/C	Raman		KCT/ME/MS/ MM/01	267351/ -	15.4.2000
20	Milling M/C	Raman		KCT//ME/MS/ MM/02	267351/ -	24.3.2000
21	Tool & cutter			KCT/ME/MS/ TCG-1	80550/-	15.4.2000
22	Radial Drilling			KCT/ME/MS/ RD/01	63658/-	24.3.2000
23	Pillar drilling			KCT/ME/MS/ PD-01	18925/-	11.3.2000
24	Centerless Grinding M/C			KCT/ME/MS/ CLG-1	137640/ -	11.3.2000
25	Surface grinding M/C			KCT/ME/MS/ SG-01	60346/-	11.3.2000
26	Planning M/C			KCT/ME/MS/ PL-01	296215/ -	25.5.2000
27	Slotting M/C		6"	KCT/ME/MS/ SL-01	76881/-	25.5.2000
28	Slotting M/C		12"	KCT/ME/MS/ SL-02	114727/ -	24.3.2000
29	Gear hobbing M/C			KCT/ME/MS/ GH-01	305895/ -	8.6.2001
30	Power hacksaw M/C			KCT/ME/MS/ PH-01	24947/-	9.11.2000
31	Lathe	sona	4FT	KCT/ME/MS/L T/SONA-01	68085/-	10.9.2007
32	Lathe	sona	4FT	KCT/ME/MS/L T SONA-02	68085/-	10.9.2007
33	Lathe	sona	4FT	KCT/ME/MS/L T/SONA-03	68085/-	10.9.2007
34	Lathe	Sona	4FT	KCT/ME/MS/L T/SONA-04	68085/-	10.9.2007
35	Lathe tool dynamometer			KCT/ME/MS/L TD-01	26906.1 5/-	27.02.2001
36	Milling tool dynamometer			KCT/ME/MS/ MLT/01	25000/-	29.3.2016
37	Lathe tool dynamometer			KCT/ME/MS/L DT/02	22000/-	29.3.2016
38	CIF accessories Dynamometer software				15000/-	29.3.2016
39	Electric Arc Welding M/c	TOSHO N		KCT/ME/MS/ AWM/01	7,560/-	MARCH 2017
40	Helical Gear	TEI		KCT/ME/MS/	35,400/-	06/03/2018

	Attachment			MM/01[a]		
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DETAILS OF STOCK VERIFICATION OF INVENTORY- KCG
COLLEGE OF TECHNOLOGY, CHENNAI

DEPARTMENT: MECHANICAL
LABORATORY/SECTION: CAD / CAM

Sl. No	Item/ Equipment	Make	Model	Stock Sl.No	Cost in Rs	Year of Purchase
1	Computers	Intel pentium	500 GB HDD 4 GB RAM	KCT/ME /CAD/01 - 38	Acct Maintained by CSE Dept	2008
2	Server	IBM	160 GB HDD 4 GB RAM	KCT/ME /CAD/SE R-01	2,50,000	2007
3	Printer	HP Laser jet	P4015n	KCT/ME /CAD/P- 01	Acct Maintained by CSE Dept	2011
4	Printer	HP Design jet	D2460	KCT/ME /CAD/P- 03	Acct Maintained by CSE Dept	2006
5	Plotter	HP	A-1 Mono	KCT/ME /CAD/P- 02	51,500	2004
6	Scanner	Canon	Lide 110	KCT/ME /CAD/Sc a-01	3.500	2011
1	Soild Works	SIM TECH	2016 -17	-	1,06,950	2017
2	Auto CAD	India Creative Solutions (p) Ltd	2012	-	55,150	2011
3	Ansys	Innovent Engg Solutions (p) Ltd	2017	-	4,10,000	2017
4	Edge cam	Kriatec services	2017	-	84,960	2017
1	Computers	Intel pentium	500 GB HDD 2 GB RAM	KCT/ME /CAM/01 - 3	Acct Maintained by CSE Dept	2016
2	CNC Machine (Lathe)	M TAB	XL TURN	KCT/ME /CAM/M /C 01	6,05,000	2002
3	CNC Machine	Machine Tools Traders	XL TURN	KCT/ME /CAM/M	6,61,867	2004

	(Lathe)			/C 03		
4	CNC Machine (Milling)	M TAB	XL MILL	KCT/ME /CAM/M /C 02	6,90,585	2002

DETAILS OF STOCK VERIFICATION OF INVENTORY-
KCG COLLEGE OF TECHNOLOGY, CHENNAI

DEPARTMENT: MECHANICAL

LABORATORY/SECTION: ENGINEERING PRACTICES LABORATORY

Sl. No	Item/ Equipment	Make	Model	Stock Sl.No	Cost in Rs	Year of Purchase
1	Bench drilling Machine	Shram deep Industries	TOOL EX	KCT/ME /BW/01	4,775	02.10.1998
2	Bench Grinding Machine	Atlas grinder	1HP 3 Phase	KCT/ME /BW/02	4,215	27.04.2000
3	Anvil-small		50kg	KCT/ME /BW/03	1,540	30.11.2000
4	Anvil-big		100kg	KCT/ME /BW/03 A,B,C,D	22,000	30.11.2000
5	Manual Shearing Machine			KCT/ME /BW/04	3,250	10.11.2000
6	Swege block 12"x12"x4"			KCT/ME /BW/05	1500	30.11.2000
7	Welding Transformer	Esab India Limited	Transw eld 400	KCT/ME /BW/06	30,985	26.07.2001
8	Welding Transformer	Esab India Limited	Transw eld 400	KCT/ME /BW/07	30,985	26.07.2001
9	Furnace-1	Almech Enterprises	Almech Enterpr ises	KCT/ME /BW/08	19,080	18.07.2001
10	Furnace-2	Almech Enterprises	Almech Enterpr ises	KCT/ME /BW/09	19,080	18.07.2001
11	Furnace-3	Almech Enterprises	Almech Enterpr ises	KCT/ME /BW/10	19,080	18.07.2001
12	Welding Booth	Almech Enterprises		KCT/ME /BW/11 A,B,C	26,078	16.07.2001
13	Pump 1/4 hp	Sharp 003		KCT/ME /BW/12	2,015	
14	Welding Transformer	Prince make	250A	KCT/ME /BW/13	11,603	24.03.2006
15	Welding Transformer	Prince make	250A	KCT/ME /BW/14	11,603	24.03.2006
16	Welding Transformer	Prince make	250A	KCT/ME /BW/15	11,603	24.03.2006
17	Welding Booth	Fabricated Internally		KCT/ME /BW/16 D,E	8,006	20.04.2006

18	Injection Moulding Machine	VI micro system	VMIM T-12	KCT/ME /BW/17	50,319	20.11.2007
19	Oxygen Cylinder	-	-	KCT/ME /BW/18	10,250	3.11.2009
20	Acetylene cylinder	-	-	KCT/ME /BW/19	6,250	3.11.2009
21	Rotary Hammer	Bosch		KCT/ME /BW/20	9880	26.07.2010
22	Demolisan Hammer	Bosch	GSH388	KCT/ME /BW/21	27560	26.07.2010
23	Circular Saw	Bosch	GKS190	KCT/ME /BW/22	8350	26.07.2010
24	Planner	Bosch	GHO2682	KCT/ME /BW/23	9550	26.07.2010
25	Hand Drilling Machine	Bosch	GBM 10RE	KCT/ME /BW/24	4750	26.07.2010
26	Jig Saw	Bosch	GST65E	KCT/ME /BW/25	6280	26.07.2010
27	Angel Grinder	Bosch		KCT/ME /BW/26	4680	26.07.2010
28	Bench Drilling Machine	MTT		KCT/ME /BW/27		
29	Power Hacksaw Machine	MTT		KCT/ME /BW/28		
30	Circular Saw			KCT/ME /BW/29	7670	March 2018
31	Planner			KCT/ME /BW/30	4720	March 2018
32	Hand Drilling Machine			KCT/ME /BW/31	5310	March 2018