

DEENBANDHU CHOTURAM UNIVERSITY OF SCIENCE & TECHNOLOGY, MURTHAL
(DEPARTMENT OF MECHANICAL ENGINEERING)

List of Equipments/Apparatus: SOM LAB.

Sr. Nos.	Name of items	Qty.
1.	Brinell hardness testing m/c	01
2.	Rockwell hardness testing m/c	01
3.	Vickers hardness testing m/c	01
4.	Erichsen sheet metal tester	01
5.	Torsion testing m/c	01
6.	Universal testing m/c	01
7.	Pendulum impact tester	01
8.	Budh lindlay extensometer	01
9.	Variable gauge length extensometer	01

List of Equipments/Apparatus: RAC LAB.

Sr. Nos.	Name of items	Qty.
1.	Refrigeration test rig	01
2.	Mechanical heat pump	01
3.	Air conditioning tutor	01
4.	Air conditioning test rig	01
5.	Ice plant test rig	01
6.	Cut sectional model of chilling plant	01
7.	Cut sectional model of reciprocating compressor	01
8.	Cut sectional model of root blower	01
9.	Window a/c test rig	01
10.	Cut sectional model of rotary compressor	01

List of Equipments/Apparatus: Materials Science Lab.

Sr. nos.	Name of items	Qty.
1	Metallurgical micro scope	1
2	De-Form Software V11.01	1
3	Muffle Furnace	1
4	Jomini Quench Apparatus	1

List of Equipments/Apparatus: Measurement & Instrumentation Lab.

Sr. nos.	Name of items	Qty.
1	Oscilloscope	01
2	Linear displacement transducer	01
3	Low pressure transducer	01
4	high transducer	01
5	Load measurement tutors	01
6	Displacement measurement tutors	01
7	Strain measurement tutors	01

List of Equipments/Apparatus: KOM LAB

Sr. nos.	Name of items	Qty.
1.	Spur gear 9115	01
2.	Bevel gear 9155	01
3.	Helical gear 9156	01
4.	Spiral gear 9159	01
5.	Rack & pinion model 9165	01
6.	Flexible coupling 9262	01
7.	Oldham coupling 9266	01
8.	Belt drives single stage/speed 9226	01
9.	Belt drives two stage 9227	01
10.	Belt drive loose & fast pulley 9228	01
11.	Swivel bearing 9243	01
12.	"D" slide valve steam engine 10170	01
13.	Belt friction apparatus	01
14.	Pantograph mechanism	01
15.	Whitworth quick return mechanism	01
16.	Quick return mechanism slotted lever type	01
17.	Single stage spur gear	01
18.	Shaper model	01
19.	Model of ordinary governors (a) Centrifugal (b) Governors model	01
20.	Compound screw jack	01
21.	Crony (Prony) brake dynamometer	01
22.	Crank & connecting rod Model	01
23.	Slider crank mechanism i.e. (i) Reciprocating engine mechanism, (ii) Oscillating cylinder mechanism, (iii) Whitworth quick return mechanism	Set of 03
24.	Kinematic pairs i.e. Sliding pair, Screw pair (2 type) Spherical pair, Rolling pair(2 type), Turning pair, Completely constrained motion, Gear wheels(2 type), Links(2 type), all are mounted on wooden board	01 set
25.	Cam & follower (Five on wooden board)	01
26.	Four bar links mechanism	01
27.	Scotch yoke mechanism	01
28.	Watts mechanism	01
29.	Pulley models i. e. A, B, C, D (9225)	04
30.	Union joint model mounted on base (wooden)	01
31.	Interference & Undercutting	01
32.	Rope brake dynamometer	01
33.	Whirling of shaft VB-2	01

List of Equipments/Apparatus: DOM LAB

Sr. nos.	Name of items	Qty.
1.	Tachometer "Kay C make"	01
2.	Pendulum with base ring knife edge without stop watch	02
3.	Loaded governor	01
4.	Governor model with rotator	01
5.	Screw efficiency apparatus	01
6.	Cam analysis machine VB-1	01
7.	Universal governor apparatus TM-4	01
8.	Static & Dynamic Balancing Machine	01
9.	Motorized Gyroscope TM-1	01
10.	Standard gyroscope	
11.	Gyroscope with counterpoise	
12.	Bicycle wheel gyroscope	

List of Equipments/Apparatus: EME LAB

S. No.	Name of Items with Specification	Qty.
1.	Compound Screw Jack	02
2.	Screw Jack 810 ME Simple	01
3.	Worm & Worm Wheel (Single)	02
4.	Worm & Worm Wheel (Double)	02
5.	Worm & Worm Wheel (Triple)	02
6.	Double Purchase Winch Crab with wall Bracket	01
7.	Double Purchase Winch Crab with wall Bracket	01
8.	Winch Hoisting Crab-274 ME	01

List of Equipments/Apparatus: AUTO LAB

S. No.	Name of Items with Specification	Qty.
1	Dynamo Armature with bearing plate	01
2	Automatic Electric Training Bench	01
3	Epicyclical Gear	01
4	Differential Gear	01
5	Conical Friction Clutch	01
6	Band Brake	01
7	Universal Coupling	01
8	Hooks Coupling (Single)	01
9	Hooks Coupling (Double)	01
10	Reversing Gear	01
11	P-Carburetor	01
12	Fuel Pump	01
13	Distributor Assembly	01
14	Piston Ring	01
15	Valve EVL	01
16	Cam Shaft	01
17	Crank Shaft	01
18	Propeller Shaft	01
19	Automobile Wheel Assembly	01
20	Proving Ring Compression Assembly	01
21	Steering Mechanism	01
22	Hydraulic Brake Model	01
23	Mechanical Brake Model	01
24	Winkle Engine Model	01
25	Clutch Plate	01
26	Motor Car Gear Box	01
27	Cylinder Block & Piston Assembly	01
28	Differential Gear box Assembly with Hub & Gear	01
29	Steering Mechanism	01
30	Gear Box Assembly along with Lever Gear System	01
31	Self Starter	01
32	Fuel Supply System Petrol Engine Model	01
33	Fuel Supply System Diesel Engine Model	01
34	Internal Expanding Brake	01
35	Model of Centrifugal Clutch	01
36	Dynamo (Lucas TVS)	01
37	Valve Seat Grinding	01
38	Spark Plug	01
39	Clutch Assembly	01

List of Equipments/Apparatus: ENERGY CONVERSION LAB

S. No.	Name of Items with Specification	Qty.
1.	Steam Turbine Test Rig with Separating Throttling Calorimeter, Steam Flow meter & Vertical Oil Fired Boiler TS-300	01
2.	Air Compressor Single Stage Test Rig	01
3.	Reducing Valve	01
4.	Anti Priming Pump	01
5.	Water Gauge Model	01
6.	Expansion Steam Trap	01
7.	Bourdon Pressure Gauge Large	01
8.	Combined High Steam & Safety Valve	01
9.	Cornish Boiler	01
10.	Surface Condenser Model	01
11.	Fusible Plug Set (03)	01

List of Equipments/Apparatus: I C ENGINE LAB

S. No.	Name of Items with Specification	Qty.
1.	4 Stroke 4-Cylinder Petrol Engine Test Rig	01
2.	4 Stroke 2-Cylinder diesel Engine Test Rig	01
3.	2 Stroke Engine Test Rig Consisting of 2 Stroke Engine Eddy Current Dynamometer etc.	01
4.	Exhaust Gas Analyzer AVL make 422 Analyze COHC	01
5.	Computerized Diesel Engine Test Rig	01
6.	2 Stroke 1-Cylinder Petrol Engine Test Rig	01
7.	Uni-Insta, 4 Stroke 1-Cylinder Water Cooled 10 HP	01
8.	Gassifire Set	01
9.	4-Cylinder Petrol Engine Model	01
10.	Cut Section Model of 4-Stroke Diesel Engine	01
11.	Exhaust Gas Analyzer, R-89 Model-KAL, USA made	01
12.	Section Working Model of 4-Stroke Petrol Engine	01
13.	Section Working Model of 2-Stroke Petrol Engine	01

List of Equipments/Apparatus: VIBRATION LAB

S. No.	Name of Items with Specification	Qty.
1.	VIBRATION ROTOR KIT	01
2.	TWO CHANNEL PORTABLE FFT ANALYZER	01

List of Equipments/Apparatus: MECHATRONICS LAB

S. No.	Name of Items with Specification	Qty.
1.	DESKTOP P.C	02
2.	MECHATRONICS TRAINING PACKAGE	01
3.	HYDRAULIC & ELECTRO-HYDRAULIC KIT	01
4.	PNEUMATIC & ELECTRO- PNEUMATIC TRAINING KIT	01
5.	EDUCATIONAL ROBOT TRAINING SYSTEM	01
6.	GENERAL PURPOSE MEMORY STORAGE	01

List of Equipments/Apparatus: **FLUID MACHINES LAB**

S. No.	Name of Equipments	Qty.
1.	Pelton turbine test rig	01
2.	Francis turbine test rig	01
3.	Kaplan turbine test rig	01
4.	Hydraulic Ram test rig	01
5.	Variable speed centrifugal pump test rig	01
6.	Multistage centrifugal pump test rig	01
7.	Gear oil Pump Test rig	01
8.	Reciprocating pump Test Rig	01

List of Equipments/Apparatus: **FLUID MECHANICS LAB**

S. No.	Name of Equipments	Qty.
1.	Test rig for pipe friction, losses across bend, Valve, Venturimeter, Orificemeter & Nozzle	01
2.	Test rig for bernoullies theorem	01
3.	Water table for flow visualization	01
4.	Test rig to study free flow thru orifice, nozzle & V Notch	01
5.	Metacentric Height Apparatus	01
6.	Vortex Flow Apparatus	01

List of Equipments/Apparatus: **HEAT TRANSFER LAB**

S. No.	Name of Items with Specification	Qty.
1.	Parallel Flow Counter Flow Heat Exchanger	01
2.	Pool Boiling Apparatus	01
3.	Heat Pipe Demonstrator	01
4.	Forced Convection Apparatus	01
5.	Emmisisy Measurement Apparatus	01
6.	Natural Convection Apparatus	01
7.	Thermal Conductivity of Insulating Powder	01
8.	Heat Transfer in Pin Fin Apparatus	01
9.	Cooling Tower Test Rig	01

List of Equipments/Apparatus: CAD LAB

S. No.	Name of Items with Specification	Qty.
1.	MODEL OF STUFFING BOX	01
2.	MODEL OF COTTER JOINT	01
3.	MODEL OF KNUCKLE JOINT	01
4.	MODEL OF PISTON WITH RING	01
5.	ESSENTRIC MODEL (10195)	01
6.	RIVETTED JOINTS (9288)	01
7.	MODEL OF INTER PENETRATION	01
8.	PROJECTION OF STRAIGHT LINE GLASS	01
9.	PROJECTION OF STRAIGHT LINE WOOD	01
10.	FLOAT STEAM TRAP	01
11.	STOP VALVE HOPKINGON TYPE	01
12.	FEED CHECK VALVE	01
13.	SOCKET & SPIGOT JOINT	01
14.	BOX OR MUFF COUPLING	01
15.	SPLIT MUFF COUPLING	01
16.	CROSS HEAD	01
17.	KEY SET (05 No.)	01
18.	LEVER SAFETY VALVE	01
19.	WALL BRACKET	01
20.	BLOW OF COCK (10148)	01
21.	RIVET 4 TYPE (9282)	01
22.	DEAD WEIGHT SAFETY VALVE	01
23.	PLUMBER BLOCK WOODEN AND IRON WITH BODY WITHOUT BOLT	01
24.	J HANGER BRACKET	01
25.	WOODEN MODEL WITH C/ ROD	01
26.	COMPUTER HCL (P IV)	05
27.	COMPUTER ACER (P IV)	04
28.	COMPUTER HP Duel Core E-6550	36
29.	MODEL OF INTER PENETRATION	01
30.	MULTIMEDIA PROJECTOR CP-X-251 (HITACHI 2100)	01
31.	PLOTTER HP INKJET SIZE A-4 REVOLUTION IN DPI(600X600X2100)	01
32.	SCANNER HP 5590A-4 SIZE WITH USB PORT	01
33.	IDEA SA 300 EDU.12M ARTISAN	04
34.	COMPUTER HP P-IV	15
35.	AUTOCAD EDUCATIONAL SOLUTION	01
36.	BOOST & FIRE AVL CD	01
37.	ANSYS SOFTWARE CD	01
38.	MULTIMEDIA PROJECTOR CP-X-251 (HITACHI 2100)	01
39.	PLOTTER HP INKJET SIZE A-4 REVOLUTION IN DPI(600X600X2100)	01
40.	IDEA SA 300 EDU.12M ARTISAN	04