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### ACADEMIC YEAR 2022-23 Department of Mechanical Engineering Lab Details

### Name of the Lab: CAD & CAM LAB (Lab. No. - 16)

Lab Area: 66m<sup>2</sup>

Sr No.	Name of the Equipment	Date of Purchase	Quantity	Cost (Rs.)
1.	Personal Computer	27/09/2011	30	7,80,750
2.	Printer	23/01/2012	1	6,300
3	3-D Printer	07/09/2015	1	35000
	Total Price			

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#### ACADEMIC YEAR 2022-23

# Department of Mechanical Engineering Lab Details

Name of the Lab: CAMD LAB (Lab. No. -15)

**Lab Area**: 66 m<sup>2</sup>

Sr No.	Name of the Equipment	Date of Purchase	Quantity	Cost (Rs.)	
1.	Personal Computer	27/09/2011	24	7,80,750	
2.	ANSYS Academic Teaching Introductory -Version 14.5	27/09/2011	1	2,40,000	
	Total Price				

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### ACADEMIC YEAR 2022-23

# Department of Mechanical Engineering Lab Details

Name of the Lab: Fluid Mechanics & Machineries(Lab No. - 20)

**Lab Area**:  $66 \text{ m}^2$ 

Sr No.	Name of the Equipment	Date of Purchase	Quantity	Cost (Rs.)
1.	Verification of Bernoulis Theorem	24/10/2011	1	34,000
2.	Losses in Pipe Appartus	24/10/2011	1	32,000
3.	Metric Centric Height of Ship Model	24/10/2011	1	19,000
4.	Reynolds Appartus	24/10/2011	1	21,000
5.	Flow measusements by Venturi& Orifice	24/10/2011	1	38,000
6.	Pipe friction appartus	24/10/2011	1	38,000
7.	Centrifugal Pump Test Rig	22/09/2011	1	68,000
8.	Reciprocating Pump Test Rig	22/09/2011	1	69,000
9.	Francis Turbine Test Rig	22/09/2011	1	1,15,000
10.	Pelton Turbine Test Rig	22/09/2011	1	3,99,000
11.	Cavitation Test Rig Apparatus	22/09/2011	1	72,000
	<b>Total Price</b>			9,05,000

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### ACADEMIC YEAR 2022-23

# Department of Mechanical Engineering Lab Details

Name of the Lab: Heat Transfer (Lab No. - 21)

**Lab Area**: 66 m<sup>2</sup>

Sr.No.	Name Of Equipment	DATE OF PURCHASE	Qty	COST(Rs.)
1)	Thermal Conductivity Of Metal Bar	27/9/2011	1	35,000
2)	Thermal Conductivity Of Liquid.	27/9/2011	1	42,000
3)	Composite Wall Apparatus.	27/9/2011	1	35,000
4)	Emissivity Measurement Apparatus.	27/9/2011	1	34,000
5)	Heat Transfer in Natural Convection	27/9/2011	1	29,000
6)	Heat Transfer in Forced Convection	27/9/2011	1	41,000
7)	Parallel and Counter flow Heat exchanger.	27/9/2011	1	38,000
8)	Heat Pipe Demonstrator Model	19/12/2014	1	33,750
9)	Unsteady state of Heat Transfer	19/12/2014	1	31,500
	Total Price	1		3,19,250



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#### ACADEMIC YEAR 2022-23

# Department of Mechanical Engineering Lab Details

Name of the Lab: I.C.Engine (Lab No. - 19)

**Lab Area**: 66 m<sup>2</sup>

Sr	Name of the	Date of	Quantity	Cost
No.	Equipment	Purchase		( <b>Rs.</b> )
1.	Single cylinder Diesel Engine(5 hp)	27/09/2011	1	12,000
2.	Multi-cylinder Petrol Engine	27/09/2011	1	2,90,000
3.	2 Stroke Petrol engine Test Rig	27/09/2011	1	95,000
	3,97,000			



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#### ACADEMIC YEAR 2022-23

# **Department of Mechanical Engineering**

# Lab Details

**Name of the Lab**: Mechatronics(Lab No. - 14)

**Lab Area**:  $66 \text{ m}^2$ 

Sr No.	Name of the Equipment	Date of Purchase	Quantity	Cost (Rs.)	
1.	PLC Trainer Kit	27/09/2011	1	1,25,000	
2.	Pneumatic Trainer	27/09/2011	1	1,18,000	
3.	Hydraulic Trainer	27/09/2011	1	1,68,000	
	Total Cost				

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### ACADEMIC YEAR 2022-23

# Department of Mechanical Engineering Lab Details

Name of the Lab: Mechanical Measurement & Control System (Lab No. - 18)

**Lab Area**: 66m<sup>2</sup>

Sr	Name of the	Date of	Quantity	Cost
No.	Equipment	Purchase	-	( <b>Rs.</b> )
1.	L.V.D.T.	27/09/2011	1 Set	12,500
	Demonstration kit			
2.	Potentiometer as error	27/09/2011	1 Set	4,500
	of generator			
3.	Dead weight Tester	27/09/2011	1Set	24,200
4	Vibration tester	27/09/2011	1Set	28,500
5	Angle Measurement	27/09/2011	1 Set	7,500
	using Sine bar			
6	Profile Projector	27/09/2011	1Set	1,10,000
7	Screwgauge	27/09/2011	1Set	65,000
	Measurement Unit			
	Floating Carriage			
	Tot	2,52,200		

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#### ACADEMIC YEAR 2022-23

# **Department of Mechanical Engineering**

# Lab Details

Name of the Lab: Material Technology(Lab No. -13)

**Lab Area**: 66 m<sup>2</sup>

Sr No.	Name of the Equipment	Date of Purchase	Quantity	Cost (Rs.)	
1.	Microstructure Set of 23 Pieces	04/08/2013	1	19,750	
2.	Metallurgical Microscope SM-8	04/08/2013	1	33,000	
3.	Fatigue Testing Machine	22/12/2014	1	1,40,625	
4.	Jominey End Quench Hardner Tester	22/12/2014	1	1,04,625	
	Total Price				

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#### ACADEMIC YEAR 2022-23

# Department of Mechanical Engineering Lab Details

Name of the Lab: Mechanical Vibrations(Lab No. - 17)

**Lab Area**: 66  $m^2$ 

Sr No.	Name of the Equipment	Date of Purchase	Quantity	Cost (Rs.)	
1.	Vibration Set Up	27/07/2011	1	75,000	
2.	Whirling Apparatus	27/07/2011	1	36,000	
	Total Price				

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### ACADEMIC YEAR 2022-23

### Department of Mechanical Engineering Lab Details

**Name of the Lab**: Strength of Material (Lab No. – 13)

**Lab Area**: 66 m<sup>2</sup>

Sr	Name of the	Date of	Quantity	Cost	
No.	Equipment	Purchase			
1.	Universal Testing Machine	24/02/2011	1	3,40,000	
2		24/02/2011	1	1 40 250	
2.	Torsion Testing Machine	24/02/2011	1	1,40,250	
3.	Impact Testing Machine	24/02/2011	1	85,000	
4	Combined hardness Testing Machine	24/02/2011	1	46,750	
	Total Price				

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#### ACADEMIC YEAR 2022-23

### Department of Mechanical Engineering Lab Details

**Name of the Lab**: Thermal Engineering (Lab No. -12)

Lab Area:66 m<sup>2</sup>

Sr.No.	Name Of Equipment	Date Of Purchase	Qty	Cost (Rs.)
1)	Locomotive Boiler Model	10/8/2011	1	11,500
2)	Lan Cashier Boiler Model	10/8/2011	1	11,500
3)	Babcock and Wilcox Boiler Model	10/8/2011	1	11,500
4)	Pressure & velocity compounded steam turbine	10/8/2011	1	11,500
5)	Gas Turbine Model	10/8/2011	1	6,500
6)	Dead Wt. Safety valve model	10/8/2011	1	2,600
7)	Lever loaded safety valve model	10/8/2011	1	2,750
8)	Spring loaded safety valve model	10/8/2011	1	2,650
9)	Hoop valve	10/8/2011	1	3,500
10)	Feed Check valve	10/8/2011	1	2,500
11)	High steam & low water safety valve	10/8/2011	1	4,500
12)	Orsat apparatus	10/8/2011	1	8,500
13)	2 HP two stage twin cylinder reciprocating air compressor	10/8/2011	1	1,25,000
	Total Price			2,04,500

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#### ACADEMIC YEAR 2022-23

# Department of Mechanical Engineering Lab Details

Name of the Lab: Theory of Machine (Lab No. -17)

**Lab Area**:  $66 \text{ m}^2$ 

Sr No.	Name of the Equipment	Date of Purchase	Quantity	Cost (Rs.)	
1.	Cluthes	27/07/2011	1	12,000	
2.	Brakes	27/07/2011	1	16,000	
3.	Rope Brake Dynamometer	27/07/2011	1	55,000	
4.	Governers.	27/07/2011	1	39,000	
5.	Cam and followers	27/07/2011	1	36,000	
6.	Gyroscope	27/07/2011	1	40,000	
7.	Kinematic Of Gears	10/08/2011	1	5,460	
8.	Inversion of four bar link mechganism	10/08/2011	1	7,020	
	Total Price				

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#### ACADEMIC YEAR 2022-23

## Department of Mechanical Engineering Lab Details

#### Name of the Lab: RAC (Lab No. -12)

**Lab Area**: 66 m<sup>2</sup>

Sr No.	Name of the Equipment	Date of Purchase	Quantity	Cost (Rs.)
1.	Ice Plant Test Rig	03/09/2013	1 Set	1,10,000
2.	Vapour Compression Refrigeration System Test Rig	03/09/2013	1 Set	48,000
3.	Vapour Absorption Refrigeration System Test Rig	03/09/2013	1 Set	65,000
4.	Air Conditioning System Test Rig	03/09/2013	1 Set	1,08,000
	3,31,000			

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#### ACADEMIC YEAR 2022-23

# Department of Mechanical Engineering Lab Details

**Name of the Lab**: Engineering Mechanics (Lab No. -12) **Lab Area**: 66 m<sup>2</sup>

Sr No.	Name of the Equipment	Date of Purchase	Quantity	Cost(Rs.)
1.	Universal Force Apparatus	28/08/2011	2 Set	17,000
2.	Paralleogram of Force apparatus	28/08/2011	1 Set	5,000
3.	Polygon of Forces Apparatus	28/08/2011	1Set	2,500
4	Parallel Forces Apparatus Dial Type	28/08/2011	1Set	8,000
5	Bell Crank Lever	28/08/2011	2 Set	5,000
6	Collusion of Elestic Bodies	28/08/2011	2 Set	3,500
8	Simple Jib Crane	28/08/2011	2 Set	2,500
9	Friction slide Apparatus with Inclined Plane	28/08/2011	2 Set	8,400
10	Combined Coil &Belt Friction Apparatus	28/08/2011	1Set	7,500
11	Moment Inertia of fly wheel 25 cms Dia.	28/08/2011	1Set	3,800
12	Compound Pendulum	28/08/2011	1Set	700
13	Simple Pendulum	28/08/2011	1Set	115
14	Stop clock esal make	28/08/2011	2Set	1,500
16	Weight with hanger ( 4 Weight + 1 Hanger)A) 2 Kgs Iron B)1 Kgs Iron C)1/2 Kgs Iron D)100 Gms Brass E)50 Gms Brass F)20 Gms Brass	28/08/2011	10 Nos. 8 Nos. 7 Nos. 6Nos. 91 Nos. 4 Nos.	2,500 1,200 660 1,160 700 360
	69,595			

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