SYNERGY POLYTECHNIC, BHUBANESWAR

DEPARTMENT OF MECHANICAL ENGINEERING

Mechanical Laboratory Equipment

| Sl No. | Department Name | Laboratory Name | Equipment/Machine Available |
|--------|---------------------------|---|--|
| 01 | Mechanical Engineering | Mechanical Engineering Laboratory I | Parallel Force Apparatus Searle's Apparatus Digital Universal Testing Machine Flash Point And Fire Point Apparatus Joules Apparatus |
| 02 | Mechanical Engineering | Workshop Laboratory | Lathe Machine- 03 Drilling Machine- 02 Power Hacksaw- 01 Bench Vice- 20 CNC Lathe- 01 CNC Milling- 01 |
| 03 | Mechanical Engineering | Mechanical Engineering Drawing | Engineering Drawing Table- 50 |
| 04 | Mechanical Engineering | Theory of Machine Laboratory | 1. GOVERNOR APPARATUS 2. JOURNAL BEARING APPARATUS 3. CAM ANALYSIS APPARATUS 4. EPICYCLIC GEAR TRAIN 5. VERNIER CALLIPER |
| 05 | Mechanical Engineering | Mechanical Engineering Laboratory II | Model of 2 Stroke Petrol Engine Model of 4 Stroke Petrol Engine Model of 2 Stroke Diesel Engine Model of 4 Stroke Diesel Engine Single Stage Air Compressor Test Rig |
| 06 | Mechanical Engineering | Refrigeration and Air conditioning lab | 1. Domestic Refrigerator Test Rig 2. Vapour Absorption Test Rig 3. Split Air Conditioner Test Rig 4. Water Cooler Test Rig |
| 07 | Mechanical Engineering | Hydraulic machines &Industrial Fluid power lab | PELTON WHEEL Test Rig Kaplan turbine Test Rig Francis turbine Test Rig Centrifugal pump Test Rig |
| 08 | Mechanical Engineering | CAD/CAM Lab | 1. DESKTOP COMPUTER with UPS- 80 2. AUTOCAD SOFTWARE 2D/3D installed 3. CNC TURNING MACHINE- 01 4. CNC MILLING MACHINE- 01 |

| 09 | Mechanical | Automobile | 1. Chassis of a Car |
|----|-------------|---------------|--------------------------------------|
| | Engineering | Engineering | 2. Differential of a Car |
| | | Laboratory | 3. Hydraulic brake system of a car |
| | | | 4. Car Type Carburetor |
| | | | 5. Cut section of a fuel pump |
| | | | 6. New car engine |
| | | | 7. Gear box |
| 10 | Mechanical | Power Station | 1. Jet Cooling Tower Model |
| | Engineering | Laboratory | 2. Surface Cooling Tower Apparatus |
| | | | 3. Babcock and Wilcox boiler Model |
| | | | 4. Lancashire boiler Model |
| | | | 5. Vertical water steam boiler model |