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| **NAME OF THE LABORATORY: THERMAL ENGINEERING LABORATORY - I** |
| **S.No** | **Name of the Equipment** | **Quantity Required as per AU R2013** | **Quantity Available** | **Remarks** |
| 1 | IC Engine Two stroke & Four stroke model | 01 | 01 |  |
| 2 | Apparatus for Flash and fire point | 01 | 02 |  |
| 3 | 4-stroke diesel engine with mechanical loading | 01 | 01 |  |
| 4 | 4-stroke diesel engine with hydraulic loading | 01 | 01 |  |
| 5 | 4-stroke diesel engine with electrical loading | 01 | 02 |  |
| 6 | Multi cylinder petrol engine | 01 | 01 |  |
| 7 | Single cylinder petrol engine | 01 | 01 |  |
| 8 | Data Acquisition System | 01 | 01 |  |
| 9 | Steam Boiler with Turbine Setup | 01 | 01 |  |
| **ADDITIONAL EQUIPMENTS FOR THE LABORATORY** |
| 01 | Air Blower | Nil | 01 |  |
| 02 | Boyce Calorimeter | Nil | 01 |  |

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| **NAME OF THE LABORATORY: THERMAL ENGINEERING II LABORATORY** |
| **S.No** | **Name of the Equipment** | **Quantity Required as per AU R2013** | **Quantity Available** | **Remarks** |
| 1 | Guarded plate apparatus | 01 | 01 |  |
| 2 | Lagged pipe apparatus | 01 | 01 |  |
| 3 | Natural convection-vertical cylinder apparatus | 01 | 01 |  |
| 4 | Forced convection inside tube apparatus | 01 | 01 |  |
| 5 | Composite wall apparatus | 01 | 01 |  |
| 6 | Thermal conductivity of insulating powder apparatus | 01 | 01 |  |
| 7 | Pin-fin apparatus | 01 | 01 |  |
| 8 | Stefan-Boltzmann apparatus | 01 | 01 |  |
| 9 | Emissivity measurement apparatus | 01 | 01 |  |
| 10 | Parallel/counter flow heat exchanger apparatus | 01 | 01 |  |
| 11 | Single/two stage reciprocating air compressor | 01 | 01 |  |
| 12 | Refrigeration test rig | 01 | 01 |  |
| 13 | Air-conditioning test rig | 01 | 01 |  |
| **ADDITIONAL EQUIPMENTS FOR THE LABORATORY** |
| 01 | Heat flux Apparatus | Nil | 01 |  |
| 02 | Film and Drop wise Condensation Apparatus | Nil | 01 |  |