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Approved by AICTE, New Delhi & Affiliated to JNTUK, Kakinada

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| **BLOCK :** | **F** |
| **FLOOR :** | **FIRST** |
| **ROOM NO:** | **102** |
| **ROOM SIZE (in Sq. mtrs):** | **66** |
| **LAB NAME:** | **POWER ELECTRONICS LAB** |
| **FANS :** | **4** |
| **TUBE LIGHTS :** | **4** |
| **CHAIRS :** | **2** |
| **STAFF TABLES :** | **1** |
| **EXPERIMENT TABLES :** | **12+2** |
| **CLOSED IRON RACKS :** | **0** |
| **WOODEN CLOSED RACKS :** | **0** |
| **Others:** |  |

**LAB STATUS**

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| **SI.No.** | **NAME OF THE EXPERIMENT** | **APPARATUS REQUIRED** | **No. AVAILABLE** |
| 1 | Study of Characteristics of Thyristor, MOSFET & IGBT. | KIT | 1 |
| DUAL RPS(0-30)V | 1 |
| DIGITAL MULTI METERS | 1 |
| 2 | Single -Phase Half controlled converter with R and RL load | KIT | 1 |
| RHEOSTATS(100Ω/2A) | 1 |
| L-LOAD(0-50)MH | 1 |
| ISOLATION TRANSFOMER(230/30)V | 1 |
| 3 | Single -Phase fully controlled bridge converter with R and RL loads | KIT | 1 |
| RHEOSTATS(100Ω/2A) | 1 |
| L-LOAD(0-50)MH | 1 |
| ISOLATION TRANSFOMER(230/30)V | 1 |
| 4 | Single -Phase AC Voltage Regulator with R and RL Loads | KIT | 1 |
| RHEOSTATS(100Ω/2A) | 1 |
| L-LOAD(0-50)MH | 1 |
| ISOLATION TRANSFOMER(230/30)V | 1 |
| 5 | Single -Phase square wave bridge inverter with R and RL Loads | KIT | 1 |
| RHEOSTATS(100Ω/2A) | 1 |
| L-LOAD(0-50)MH | 1 |
| DUAL RPS(0-30)V | 1 |
| 6 | Single -phase PWM inverter with sine triangle PWM technique. | KIT | NOT AVAILABLE |
| RHEOSTATS(100Ω/2A) |
| L-LOAD(0-50)MH |
| DUAL RPS(0-30)V |
| 7 | 3-phase AC-AC voltage regulator with R-load | 3-PHASE AUTO TRANSFORMER 5KVA | 1 |
| 3-PHASE SCR MODULE | 1 (SERVICING) |
| MICRO CONTROLLER TRAINER KIT | 1 |
| THRE PHASE TRANSFORMER | 1 |
| 8 | Design and development of a firing circuit for Thyristor. |  | NOT AVAILABLE |
| 9 | Design and development of gate drive circuits for IGBT. |  | NOT AVAILABLE |
| 10 | Three- Phase fully controlled converter with RL–load. | 3-PHASE AUTO TRANSFORMER 5KVA | 1 |
| 3-PHASE SCR MODULE | 1 (SERVICING) |
| MICRO CONTROLLER TRAINER KIT | 1 |
| THRE PHASE TRANSFORMER | 1 |

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| **S.NO** | **NAME OF THE EQUIPMENT** | **RATING** | **QTY** |
| 1 | SCR,IGBT,MOSFET CHARACTERSTIC KIT |  | 1 |
| 2 | SINGLE PHASE HALF BRIDGE CONVERTER KIT |  | 1 |
| 3 | SINGLE PHASE FULL BRIDGE CONVERTER KIT |  | 1 |
| 4 | SINGLE PHASE AC VOLTAGE CONTROLLER KIT |  | 1 |
| 5 | DUAL CONVERTER KIT |  | 2 |
| 6 | SINGLE PHASE PWM INVERTER KIT |  | 1 |
| 7 | BUCK,BOOST ,BUCK-BOOST CONVRTER KIT |  | 1 |
| 8 | SCR FIRING CIRCUIT KIT |  | 1 |
| 9 | SERIES INVERTER KIT |  | 2 |
| 10 | FORCE COMMUTATION CIRCUIT KIT |  | 1 |
| 11 | DC-JOHNS CHOPPER |  | 1 |
| 12 | SINGLE PHASE VARIAC | (0-230)V | 1 |
| 13 | SINGLE PHASE TRANSFORMER | (0-230)/(0-30)V) | 5 |
| 14 | CRO'S |  | 8 |
| 15 | DUAL RPS | (0-30)V | 2 |
| 16 | SINGLE RPS | (0-30)V | 3 |
| 17 | RHEOSTATS | 100Ω/2A | 5 |
| 18 | RHEOSTATS | 150Ω/5A | 1 |
| 19 | STABILIZER | 10KVA-3PH | 1 |
| 20 | INDUCTIVE LOAD | (0-50)MH | 5 |
| 21 | INDUCTIVE LOAD | (0-150)MH | 1 |
| 22 | SINGLE PHASE CYCLO CONVERTER KIT |  | 1 |