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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 CONVERTERS &DRIVES 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 | Analysis and speed control of DC motor drive using 3-phase full Converter. | 3-PHASE AUTO TRANSFORMER 5KVA | 1 |
| 3-PHASE SCR MODULE | 1 (SERVICING) |
| MICRO CONTROLLER TRAINER KIT | 1 |
| THRE PHASE TRANSFORMER0-230)/0-24V,150A | 1 |
| DC MOTOR | 1 |
| 2 | Analysis of a four quadrant Chopper feeding DC motor. | KIT | 1(SERVICING) |
| 3 | Analysis of a 3-phase A.C. Voltage controller fed to R & RL - load. | 3-PHASE AUTO TRANSFORMER 5KVA | 1 |
| 3-PHASE SCR MODULE | 1 (SERVICING) |
| MICRO CONTROLLER TRAINER KIT | 1 |
| THRE PHASE TRANSFORMER0-230)/0-24V,150VA | 1 |
| R LOAD -100 OHMS , | NOT AVILABLE |
| L LOAD -50mH | 1 |
| 4 | Analysis of Buck, Boost, Buck-Boost DC-DC converters. | KIT | 1 |
| R LOAD -100 OHMS | 1 |
| 5 | Analysis of Single Phase IGBT based PWM Inverter connected to R & R-L load | 3-PHASE VOLTAGE SOURCE INVERTER POWER MODULE | 1 |
| MICRO CONTROLLER TRAINER KIT | 1 |
| R LOAD -100 OHMS , | NOT AVILABLE |
| L LOAD -50mH | 1 |
| 6 | Analysis of 3-phase IGBT based PWM Inverterfeeding R & R-L load. | 3-PHASE VOLTAGE SOURCE INVERTER POWER MODULE | 1 |
| MICRO CONTROLLER TRAINER KIT | 1 |
| R LOAD -100 OHMS , | NOT AVILABLE |
| L LOAD -50mH | 1 |
| 7 | Analysis and speed control of 3 phase slip ring Induction motor by Static Rotor Resistance controller | 3-PHASE SLIP RING INDUCTION MOTOR | 1 |
| KIT | 1 |
| 8 | Analysis of three phase SVPWM Pulse generation using PIC Micro controller/DSP | KIT | NOT AVILABLE |
| 9 | .Analysis of DSP based V/F Control of 3 phase Induction motor. | KIT | NOT AVILABLE |
| 10 | Analysis of vector control based speed control of three phase Induction Motor drive | KIT | NOT AVILABLE |

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| **S.NO** | **NAME OF THE EQUIPMENT** | **RATING** | **QTY** |
| 1 | 3-PHASE SCR MODULE |  | 1 |
| 2 | MICRO CONTROLLERS TRAINER KIT |  | 2 |
| 3 | ROTOR RESISTANCE CONTROL KIT |  | 1 |
| 4 | 3-PHASE SLIP RING INDUCTION MOTOR | 5HP | 1 |
| 5 | DC MOTOR |  | 1 |
| 6 | 3-PHASE VOLTAGE SOURCE INVERTER POWER MODULE |  | 2 |
| 7 | 4-QUADRENT DC CHOPPER KIT |  | 1 |
| 8 | 3-PHASE INDUCTION MOTOR |  | 1 |
| 9 | 3-PAHSE AUTO TRNASFORMER | 5KVA | 1 |
| 10 | 3-PHASE TRANSFORMER | (0-230)/0-24V,150A | 1 |
| 11 | 1-PHASE TRANSFORMER | 0-230V/60-60V | 1 |
| 12 | MULTI METERS |  | 5 |
| 13 | TACHO METER | DIGITAL | 1 |