**METHODIST COLLEGE OF ENGINEERING AND TECHNOLOGY, ABIDS**

**IV Semester EEE – Assignment -II**

**Subject: Power Electronics**

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|  | **Unit -II** | **CO No.** | **BT Level** |
| 1 | Analyze the operation of single phase bridge fully controlled rectifier with RL load. | CO3 | Analyze |
| 2 | Compare the operation of single phase Half-wave controlled rectifier with R-load and RL load. | CO3 | Analyze |
| 3 | Explain the operation of class C And Class D commutation circuits of SCR. | CO2 | Understand |
| 4 | Analyze the importance of free-wheeling diode in single phase controlled rectifier, when the load is RLE. | CO3 | Analyze |
| 5 | Analyze the operation of single phase Half-wave controlled rectifier with RE-load. | CO3 | Analyze |

After completing the course, the students will be able to able to

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| **CO No.** | **Course Outcome** | **Taxonomy**  **Level** |
| 401.1 | Explain the characteristics and performance of various power electronic devices. | **Understand** |
| 401.2 | Classify firing circuits of SCR and commutation circuits of SCR | **Understand** |
| 401.3 | Analyze single and three phase controlled rectifier circuits. | **Analyze** |
| 401.4 | Analyze the performance of AC voltage controllers & choppers circuits | **Analyze** |
| 401.5 | Analyze the performance of single phase inverter circuits. | **Analyze** |
| 401.6 | Explain the operation of three phase voltage source inverters. | **Understand** |