| Discipline – Electrical Engg | Semester 5th | NAME OF THE TEACHING FACULTY- SIBANI PANDA, LECT(ELECT.) | |
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| SUB- PE & PLC LAB | No Of Days Per Week Class Alloted- 6 P | SEMESTER FROM 01.08.2023 to 30.11.2023<br>NO OF WEEK – 15 WEEKS | |
| Week | ClassDay | Topics | Status |
| 1st | Group1 (3p) | 1.Study of switching characteristics of a power transistor | |
| | Group2 (3p) | 1.Study of switching characteristics of a power transistor | |
| 2nd | Group1 (3p) | 2.Study of V-I characteristics of SCR | |
| | Group2 (3p) | 2.Study of V-I characteristics of SCR | |
| 3rd | Group1 (3p) | 3.Study of V-I characteristics of TRIAC. | |
| | Group2 (3p) | 3.Study of V-I characteristics of TRIAC. | |
| 4th | Group1 (3p) | 4. Study of V-I characteristics of DIAC. | |
| | Group2 (3p) | 4. Study of V-I characteristics of DIAC. | |
| 5th | Group1 (3p) | 5. Study of drive circuit for SCR & TRIAC using DIAC. | |
| | Group2 (3p) | 5. Study of drive circuit for SCR & TRIAC using DIAC. | |
| 6th | Group1 (3p) | 6. Study of drive circuit for SCR & TRIAC using UJT. | |
| | Group2 (3p) | 6. Study of drive circuit for SCR & TRIAC using UJT. | |
| 7th | Group1 (3p) | 7. To study phase controlled bridge rectifier using resistive load. | |
| | Group2 (3p) | 7. To study phase controlled bridge rectifier using resistive load. | |
| 8th | Group1 (3p) | 8. To study series Inverter. | |

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| | Group2 (3p) | 8. To study series Inverter. | |
| 9th | Group1 (3p) | 9. Study of voltage source Inverter | |
| | Group2 (3p) | 9. Study of voltage source Inverter | |
| 10th | Group1 (3p) | 10. To perform the speed control of DC motor using Chopper. | |
| | Group2 (3p) | 10. To perform the speed control of DC motor using Chopper. | |
| 11th | Group1 (3p) | 11. To study single-phase Cyclo-converter | |
| | Group2 (3p) | 11. To study single-phase Cyclo-converter | |
| 12th | Group1 (3p) | 12. Introduction/Familiarization PLC Trainer & its Installation with PC (a) Learn the basics and hardware components of PLC (b) Understand configuration of PLC system (c) Study various building blocks of PLC (d) Determine the No. of digital I/O & Analog I/O | |
| | Group2 (3p) | 12. Introduction/Familiarization PLC Trainer & its Installation with PC (a) Learn the basics and hardware components of PLC (b) Understand configuration of PLC system (c) Study various building blocks of PLC (d) Determine the No. of digital I/O & Analog I/O | |
| 13th | Group1 (3p) | 13. Execute the different Ladder Diagrams (a) Demonstrate PLC and Ladder diagram-Preparation downloading and running (b) Execute Ladder diagrams for different Logical Gates (c) Execute Ladder diagrams using timers & counters | |
| | Group2 (3p) | 13. Execute the different Ladder Diagrams (a) Demonstrate PLC and Ladder diagram-Preparation downloading and running (b) Execute Ladder diagrams for different Logical Gates (c) Execute Ladder diagrams using timers & counters | |
| 14th | Group1 (3p) | 14. Execute the Ladder Diagrams with model applications (i) DOL starter (ii)Star- Delta starter | |
| | Group2 (3p) | 14. Execute the Ladder Diagrams with model applications (i) DOL starter (ii)Star- Delta starter | |
| 15th | Group1 (3p) | 15. Execute Ladder diagrams with model applications (i) Stair case lighting (ii) Traffic light controller | |
| | Group2 (3p) | 15. Execute Ladder diagrams with model applications (i) Stair case lighting (ii) Traffic light controller | |

31.7.23