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| Discipline  **Mechanical Engg.** | Semester: -  **4th** | Name of the Teaching Faculty: -  **Rakesh Kumar Sahoo** |
| Subject: -  **ELECTRICAL LABORATORY PRACTICE** | No of Days/per Week Class Allotted: -  **6** | Semester From: -**2nd Jan, 2019**To: -**15th Apr, 2019**  No of Weeks: -**15** |
| **Week** | **Class Day** | **Theory/ Practical Topics** |
| 1st | 1st | 1.Study of different parts and identification of terminals and testing of insulation resistance of a DC machine. (Theory) |
| 2nd | 1.Study of different parts and identification of terminals and testing of insulation resistance of a DC machine. (Practical) |
| 2nd | 1st | 2.1 Study of 3-pointstarter (Theory) |
| 2nd | 2.1 Study of 3-pointstarter (Practical) |
| 3rd | 1st | 2.2 Study of 4-point starter (Theory) |
| 2nd | 2.2Study of 4-pointstarter (Practical) |
| 4th | 1st | 3.Speed variation of DC motor by field control and armature voltage control method (Theory) |
| 2nd | 3.Speed variation of DC motor by field control and armature voltage control method (Practical) |
| 5th | 1st | 4.Identification of terminals and determination of transformation ratio of a single-phase transformer. (Theory) |
| 2nd | 4.Identification of terminals and determination of transformation ratio of a single-phase transformer. (Practical) |
| 6th | 1st | 5.Determination of regulation of transformer by direct loadings. (Theory) |
| 2nd | 5.Determination of regulation of transformer by direct loadings. (Practical) |
| 7th | 1st | 6.Measurement of earth resistance of an earthing installation. (Theory) |
| 2nd | 6.Measurement of earth resistance of an earthing installation. (Practical) |
| 8th | 1st | 7.1 Study of PMMCtype instrument. (Theory) |
| 2nd | 7.1 Study of PMMCtype instrument. (Practical) |
| 9th | 1st | 7.2 Study ofMI type instrument. (Theory) |
| 2nd | 7.2 Study of MI type instrument. (Practical) |
| 10th | 1st | 8.Start and run of a 3-phase induction rotor by Star-Delta. (Theory) |
| 2nd | 8.Start and run of a 3-phase induction rotor by Star-Delta.(Practical) |
| 11th | 1st | 9.Connect and run an alternator and starter, measure the terminal voltage on different load condition. (Theory) |
| 2nd | 9.Connect and run an alternator and starter, measure the terminal voltage on different load condition. (Practical) |
| 12th | 1st | 9.Connect and run an alternator and starter, measure the terminal voltage on different load condition(Practical)(Contd..) |
| 2nd | 10.Start and run a synchronous motor and measure its speed at no load. (Theory) |
| 13th | 1st | 10.Start and run a synchronous motor and measure its speed at no load. (Practical) |
| 2nd | 10.Start and run a synchronous motor and measure its speed at no load. (Practical)(Contd..) |
| 14th | 1st | Revision of experiment 1,2. |
| 2nd | Revision of experiment 3,4,5. |
| 15th | 1st | Revision of experiment 6,7. |
| 2nd | Revision of experiment 8,9,10. |