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| Department of Electrical and Electronics Engineering   | LP: EE18712<br>Rev. No: 00 |
| B.E/B.Tech/M.E/M.Tech : B.E., EEE<br>Regulation: 2018<br>PG Specialisation : --<br>Sub. Code / Sub. Name : EE18712 ADVANCED ELECTRICAL ENGINEERING LAB | Date:<br>23/07/2021        |

| Session No*   | List of Experiments  |
|---|--|
| <b>GROUP 1: ELECTRICAL MACHINES AND CONTROL</b>                       |  |
| 1   | DSP based speed control of Switched Reluctance Motor                         |
| 2   | Performance analysis of standalone and grid connected Induction generator.   |
| 3   | Simulation of permanent magnet synchronous motor fed by PWM                  |
| 4   | Speed control of BLDC motor.   |
| 5   | Closed loop Speed control of DC Motor using PID controller                   |
| <b>GROUP 2 : POWER SYSTEMS</b>  |  |
| 6   | Modelling and Performance evaluation of Fixed and variable speed WTGs        |
| 7   | Load Frequency Control with wind energy conversion systems                   |
| 8   | Simulation of Electric Vehicle Drive System.                                 |
| 9   | Simulation of Microgrid.   |
| 10  | Simulation of Photovoltaic power system                                      |
| <b>GROUP 3 : EMBEDDED AND NANOTECHNOLOGY</b>                          |  |
| 11  | Design and Implementation of Digital Thermometer using 8051 microcontrollers |
| 12  | Implementation of white line following Firebird V robot                      |
| 13  | Electrical Characterization of solar cell using DC Probe Station             |
| 14  | Electrical Characterization of Photodetector                                 |
| 15  | Electrical Characterization of Thin film transistor                          |
| Content beyond syllabus (if any): PLC based control of AC/DC machines |  |

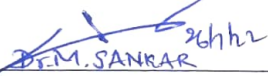
\* Session Duration: 150 minutes



Sub. Code / Sub. Name: EE18712 ADVANCED ELECTRICAL ENGINEERING LAB

|             | Prepared by   | Approved by  |
|-------------|---|--|
| Signature   |  |  |
| Name        | Dr.S.G.Bharathidasan      Dr.M.Sankar   | Dr.KR.SANTHA   |
| Designation | ASP/EEE      AP/EEE   | Vice Principal, Professor & HOD/EEE  |
| Date        | 23/07/2021  | 23/07/2021   |

Remarks\*: As there is no change in previous semester (July 2021 - Dec 2021) lesson plan, the same lesson plan is followed for this semester (July 2022 - Dec 2022)

  
Dr. M. SANKAR  
26/7/22


  
Dr. R. KANNADASAN  
26/7/22


  
Dr. KR. SANTHA  
26-7-22

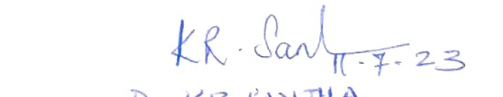
Remarks\*: APIEEE      APIEEE      VICE PRINCIPAL, PROF & HOD/EEE

As there is no change in previous semester (July 2022 - Dec 2022) lesson plan, the same lesson plan is followed for this semester (July 2023 - Dec 2023)

\* If the same lab plan is followed in the subsequent semester/year it should be mentioned and signed by the Faculty and the HOD

  
Dr. C. VENKATESAN  
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Dr. M. SANKAR  
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Dr. KR. SANTHA  
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