



**ID NO.**

**PRESIDENCY UNIVERSITY, BENGALURU**  
**SCHOOL OF ENGINEERING**

Weightage: 30 %

Max Marks: 30

Max Time: 2 hrs.

18 May Friday 2018

**ENDTERM FINAL LAB EXAMINATION MAY 2018**

Even Semester 2017-18 Course: **EEE 255 Electrical Machines Lab** IV Sem. Electrical

1. Conduct Hopkinson's test and predetermine the efficiency of a DC Shunt Generator at half load.
2. Conduct Hopkinson's test and predetermine the efficiency of a DC Shunt Motor at quarter load.
3. Conduct Hopkinson's test and predetermine the efficiency of a DC Shunt Motor at half load.
4. Conduct Swinburne's test and predetermine the efficiency of a DC Shunt Generator at half load.
5. Conduct Swinburne's test to predetermine the efficiency of a DC Shunt Motor at quarter load.
6. Conduct Hopkinson's test to obtain the efficiency characteristic of a DC Shunt Motor.
7. Conduct a suitable experiment to find the Output Power and Torque of a three phase Synchronous Motor at half load.
8. Conduct a suitable experiment to draw the Output Power Vs Speed of a three phase Synchronous Motor.
9. Conduct a suitable experiment to draw the Output Power Vs Efficiency of a three phase Synchronous Motor.
10. Conduct a suitable experiment to draw the Output Power Vs Line Current of a three phase Synchronous Motor.
11. Conduct a suitable experiment on a three phase Synchronous Motor to find the field current at UPF.
12. At 0.4 amp excitation find the total input power and pf of the three phase Synchronous Motor.
13. Conduct a suitable experiment to draw the Output Power Vs Power factor of a three phase Synchronous Motor.

14. Conduct a suitable experiment to find the torque and pf of a three phase Synchronous Motor at half load.
  15. Conduct a suitable experiment to draw the V curve of a three phase Synchronous Motor.
  16. Conduct a suitable experiment to draw the inverted V curve of a three phase Synchronous Motor.
  17. Conduct a suitable test to draw the internal characteristic of a DC Shunt Generator
  18. Conduct a suitable test to draw the internal characteristic of a DC Shunt Generator and hence find the armature reaction drop at half load.
  19. Conduct a suitable test to find the total voltage drop of a DC Shunt Generator at half load.
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