



**DIPLOMA IN ELECTRICAL AND ELECTRONICS ENGINEERING**

**CENTRALIZED QUESTION BANK**

**1030234620 - ELECTRICAL MACHINES II  
PRACTICAL**

**DIRECTORATE OF TECHNICAL  
EDUCATION GOVERNMENT OF  
TAMILNADU**

## DIPLOMA END SEMESTER / YEAR EXAMINATION – 2025

**Course:** Electrical and Electronics Engineering

**Subject :** Electrical Machines II Practical

**QP Code :** 1030234620

**Time :** 3 Hours

**Date :**

**Session:**

**Max Marks:** 100

### Answer the following Questions

- 1 Conduct Load test on 3 Phase Alternator and plot the load characteristics curve.
- 2 Predetermine the Regulation of Three Phase Alternator by EMF method.
- 3 Perform Synchronization of 3 Phase Alternators by  
a) Lamp method      b) Synchroscope method
- 4 Conduct Load Test on a three phase squirrel cage induction motor and plot the performance curve.
- 5 Conduct Load Test on a three phase slip-ring induction motor and plot the performance curve.
- 6 Find the equivalent circuit constants of a three phase induction motor by conducting No-Load and Blocked Rotor tests.
- 7 Demonstrate that power factor of an induction motor load is improved by connecting capacitor bank.
- 8 Conduct Load Test on a single phase induction motor and plot the performance curve.
- 9 Conduct and Experiment to obtain the 'V' curve and inverted 'V' curve of synchronous motor.
- 10 Perform Winding of primary and secondary coils of 230V/12V, 500m A Transformer. Insert suitable cores and Check the output voltage.
- 11 Make end connection to a three phase induction motor winding for a two pole/four pole operations and verify the output.

### Allocation of Marks

Sl. No	Description	Marks
1	Aim & Apparatus Required	10
2	Circuit Diagram	25
3	Connections	25
4	Execution and Output/Result	30
5	Viva Voce	10
<b>Total</b>		<b>100</b>