



**DIPLOMA IN ELECTRICAL ENGINEERING AND  
ELECTRIC VEHICLE TECHNOLOGY**

**CENTRALIZED QUESTION BANK**

**1032234620- MOTOR DRIVES AND CONTROL FOR EV**

**DIRECTORATE OF TECHNICAL  
EDUCATION GOVERNMENT OF  
TAMILNADU**

## DIPLOMA END SEMESTER / YEAR EXAMINATION – 2025

**Course:** Electrical Engineering and Electric Vehicle Technology

**Subject :** Motor Drives and Control For EV

**QP Code :**1032234620

**Time :** 3 Hours

**Date :**

**Session:**

**Max Marks:**100

### Answer the Following Questions

1.      a. Conduct Load Test on DC Shunt Motor and Draw the Performance Curve.  
       b. Reverse the direction of rotation of the DC shunt motor.
2.      Conduct Load Test on DC Series Motor and Draw the Performance Curve
3.      Conduct Speed Control of DC Shunt Motor by
  - a. Armature Control Method
  - b. Field Control Method
4.      Conduct Load Test on Single Phase Transformer.
5.      Conduct Load Test on a Single phase induction motor and plot the performance curve.
6.      Conduct Load Test on Three Phase slip ring Induction Motor.
7.      Conduct Load Test on Three Phase Squirrel cage Induction Motor.
8.      Conduct the No-load and Blocked-rotor tests on give three phase squirrel cage induction motor.
9.      Connect and run the three phase squirrel cage induction motors (in both directions) using the DOL starter, Star delta starter and autotransformer starter.
10.     Control the speed of the given three phase squirrel cage / slip ring induction motor using below any one method:
  - i) Auto-transformer (or)
  - ii) VVVF.
11.     Test the given Stepper motor drive.
12.     Test the given Servo motor drive.

### 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>