

S. B. Roll. No.....

**ELECTRICAL MACHINES-II**  
**5<sup>th</sup> Exam/Elect/4526/Nov'24**  
**(For 2018 Batch Onwards)**

**Duration: 3Hrs.**

**M.Marks:75**

**SECTION-A**

**Q1. Do as directed.**

**15x1=15**

- a. For high speed and high speed Torque \_\_\_\_\_ motor is preferred.
- b. Why the induction motors are called asynchronous motor?
- c. Yoke of an induction motor is made of \_\_\_\_\_
- d. The function of Starter is to \_\_\_\_\_ the motor.
- e. The value of Slip of an induction motor at the starting instant is \_\_\_\_\_
- f. Stator Stampings are made up of \_\_\_\_\_
- g. A Squirrel Cage Induction Motor has \_\_\_\_\_ Starting Torque.
- h. The starting winding of a single phase motor is placed in the \_\_\_\_\_
- i. The magnetizing current drawn by transformers and induction motors are the cause of their \_\_\_\_\_ power factor.
- j. When load is placed on a three phase induction motor its speed \_\_\_\_\_.
- k. On what factors, the speed of an induction motor depends?
- l. Does a shaded motor have high starting torque?
- m. Skewing of motor bars in a squirrel cage induction motor is to prevent \_\_\_\_\_.
- n. The effect of increasing the length of air gap in an induction motor will be to increase the \_\_\_\_\_
- o. Why should a motor be named Universal motor?

**SECTION-B**

**Q2. Attempt any six questions.**

**6x5=30**

- i. Explain working principle of single phase induction motor.
- ii. Discuss the Working Principle of 3-Phase Induction Motor.
- iii. Discuss the necessity on Starter in 3-Phase Induction Motor.
- iv. An 8-Pole, 3-Phase induction Motor is connected to 50 Hz Supply. If it is running at 720 r.p.m Find the slip.
- v. Explain double field revolving theory in single phase induction motor.
- vi. Write a note on capacitor start and run motor.
- vii. Explain torque- slip curve with suitable diagram.
- viii. Write a note on Reluctance motor.

**SECTION-C**

**Q3. Attempt any three questions.**

**3x10=30**

- a. Explain Direct on line (D.O.L) Starter in detail with suitable diagram.
- b. Explain construction, working and applications of shaded pole motor.
- c. Explain the construction and working of double cage induction motor. Also discuss its applications.
- d. Explain Constructional Features of three Phase Induction Motor.
- e. Explain cogging and crawling in detail.
- f. Write a short note on universal motor.