

Question Bank (G scheme)

Name of subject: Electrical Engineering
Subject code:17404
Semester: IV

Unit Test :II
Course : SYME

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Chapter 03 DC Motor (4 marks)

3marks Questions:

1. Draw the diagram and write one application of dc shunt, dc series and dc compound motor.
2. Draw speed-torque characteristics of dc shunt, dc series and dc compound motor.

4 marks Questions:

3. Write main parts of DC motor and function of any four parts.

CHAPTER 5 AC Motor (24 marks)

3marks Questions:

4. State the working principle of 3 phase induction motor and write its main parts.
5. How to reverse the direction of rotation of 3 phase I.M. and draw its speed-torque characteristics.

4 marks Questions:

6. Describe speed control method of induction motor by variable frequency drive.
7. Describe direct on line starter with diagram.
8. Write two applications of following motors:
 - a. Universal motor
 - b. Servo motor
 - c. Stepper motor
 - d. Capacitor start single phase induction motor.
9. Why single phase induction motors are not self-starting? Draw the diagram of capacitor start-run Single phase induction motor.
10. Explain construction and principle of alternator.
11. Define slip and synchronous speed. Find slip and synchronous speed of 4 pole, 50Hz, 3 phase induction motor if rotor is rotating at 1250rpm.

CHAPTER 6 Utilization of Electrical Energy (18 marks)

3marks Questions:

12. Write types of enclosures and state the electric machines used in electro agro system.

4 marks Questions:

13. Write types of drives and factors for selection of motor for different drives.
14. Describe the principle of electroplating and give its two applications.
15. Explain the principle of dielectric heating and write two applications.
16. Explain the principle of induction heating and write two applications.
17. Describe the principle of electric welding and give its types.

CHAPTER 7 Electric wiring, illumination, electrical safety, Tariff and power convst. (18 marks)

3marks Questions:

18. Write types of cables and wires.
19. What is the necessity of earthing and give its types.

20.What is tariff? Write types of tariff and improvement methods of power factor.

4 marks Questions:

- 21.Draw simple electrical wiring diagram for the control of two lamps, two sockets and two fans along with supply and fuse.
- 22.Explain MCCB& ELCB.
23. Write ratings and two applications of fluorescent, CFL and LED lamps.
- 24.Which are the techniques adopted for energy conservation?
- 25.What are the safety precautions to be taken and the various safety tools available in lab while working with electrical equipment?