

Question Bank (G scheme)

Name of subject: Electrical & Electronics
Subject code: 17424
Semester: IV

Unit Test : II
Course : SYCH

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Section I Electrical

CHAPTER 3 AC motor (08 marks)

3marks Questions:

1. State the working principle of 3 phase induction motor and write its main parts.
2. Why single phase induction motors are not self-starting and give one application of each type of single phase induction motor.

4 marks Questions:

3. Compare squirrel cage and slip-ring type induction motor.
4. Describe R-split single phase induction motor with diagram.
5. Describe capacitor run single phase induction motor with diagram.

CHAPTER 5 Electrical wiring and safety (12 marks)

3marks Questions:

6. What is earthing? Why is it necessary?
7. State the necessity of fuse. Classify fuse and wires.

4 marks Questions:

8. State the meaning of ELCB and MCCB. List out their applications.
9. What are the safety precautions to be taken while working with electrical equipments?
10. Draw construction of sodium vapour lamp and write its applications.

Section II Electronics

CHAPTER 2 Bipolar Junction Transistor (08marks)

3marks Questions:

11. Draw the constructional diagram of PNP transistor and name the regions and terminals.
12. What is power amplifier and state its types.

4 marks Questions:

13. Describe the operation of NPN transistor with diagram.
14. Draw single stage CE amplifier and write function of each component.
15. Write four applications of transistor. Draw symbol of NPN and PNP transistor.

CHAPTER 3 Power Supply (12 marks)

3marks Questions:

16. Give comparison between half wave and full wave center tapped rectifiers.
17. What is the need of filter and regulator? State types of filter.
18. Draw π filter, shunt capacitor filter and LC filter.

4 marks Questions:

19. Draw block diagram of DC regulated power supply and write function of each block.
20. Describe working of zener voltage regulator with diagram.
21. Describe working of full wave bridge rectifier with input and output waveform.

Chapter 04 DC Circuits (10 marks)

4 marks Questions:

22. List the types of digital display and Compare LED with LCD.
23. Write demorgan's theorems and prove any one.
24. Which gates are called as universal gate? Draw basic gates using any one universal gate.
25. Draw symbol and write truth table for following gates:
AND, OR, NOT, NAND, NOR, EX-OR

