



FUNDAMENTALS OF ELECTRICAL AND ELECTRONICS ENGINEERING

IMPORTANT QUESTIONS

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CHAPTER – 1 OVERVIEW OF ELECTRIC COMPONENTS AND SIGNALS

3 MARKS QUESTIONS

1. Give comparison between periodical and non-periodical signals.
2. Explain pulse Signal and Triangular Signal.
3. Draw and explain ideal and practical current source.

4-MARKS QUESTIONS

4. Explain any two Passive components.

CHAPTER-2 INTRODUCTION TO SEMICONDUCTOR COMPONENTS

3 MARKS QUESTIONS

5. Explain V-I characteristics of PN junction diode.
6. State and explain classification of transistor.
7. Explain the construction of NPN transistor.

CHAPTER-3 OVERVIEW OF DIGITAL ELECTRONICS

3 MARKS QUESTIONS

8. Explain basic Logic GATEs in detail.

4 MARKS QUESTIONS

9. Explain universal gates.
10. Explain De-Morgan's theorems for two variables.

CHAPTER – 4 ELECTRIC CIRCUIT

3 MARKS QUESTIONS

11. Draw and explain flow chart of energy transformation in thermal power plant and nuclear power plant.
12. Give comparisons between A.C and D.C forms of electricity.
13. Give difference between E.M.F and Potential Difference.

14. Give comparisons between 1-phase and 3-phase supply.

4-MARKS QUESTIONS

15. State and explain ohm's law with its limitation.

16. State and explain factors affecting the value of electrical resistor.

17. Derive the equation of equivalent resistance when "n" number of resistors are connected in series.

18. Derive the equation of equivalent resistance when "n" number of resistors are connected in parallel.

CHAPTER-5 MAGNETIC CIRCUIT

3 MARKS QUESTIONS

19. State and explain Fleming's right-hand rule.

20. State and explain Fleming's left-hand rule.

21. Explain statically induced emf.

4 MARKS QUESTIONS

22. State and explain Faraday's law of electromagnetic induction.

23. Draw and explain Hysteresis loop (B-H Curve).

24. Give comparison between electric and Magnetic circuit.

CHAPTER-6 TRANSFORMER AND MACHINES

3 MARKS QUESTIONS

25. Explain working principle of a 1-phase transformer.

26. Draw and explain core type transformer.

27. Draw and explain shell type transformer.

4 MARKS QUESTIONS

28. Derive e.m.f equation of a 1-phase transformer.

29. Draw the construction of D.C Motor and explain any three parts of it.