

NOVEMBER 2023

51335/SZ24A/SE25A/
SU26A

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. Define: "LAN".
2. What is fiber optics?
3. Write a note on bandwidth.
4. What do you mean by radio transmission?
5. State the purpose of circuit switching.
6. What is multiplexing?
7. Mention the assumptions for dynamic channel allocation.
8. What are the difference between error control and flow control?
9. Define the term "Protocol".
10. Comment on shortest path algorithm.
11. List out the two advantages of network security.
12. Define the term "Cryptography".

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PART B — (5 × 5 = 25 marks)

Answer any FIVE questions.

13. How do guided media differ from unguided media?
14. Explain the functions of coaxial cable with diagram.
15. What are the features of medium earth orbit satellites? Explain.
16. Summarize the local loop used in modems.
17. Elaborate the simplex stop-and-wait protocol for an error-free channel.
18. Point out the advantages of IP version 4 protocol.
19. Write down the main purpose of simple transport protocol.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

20. Illustrate the architecture and functions of ATM Ethernet.
21. Discuss the structure of the telephone system with diagram.

22. Outline the implementation of one-bit sliding window protocol.
23. Evaluate the main purpose of internet control protocols.
24. Determine the substitution ciphers with example.