APRIL 2026

52510/326E5A/ 327E5A/341E6C/ 325E5A

Time : Three hours Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. Mention any two example networks.

2. What is the difference between OSI and TCP/IP models?

3. Define data communication.

4. What is meant by switching?

5. What are the design issues of the data link layer?

6. Define error correction.

7. What is meant by channel allocation?

8. Write a short note on Bluetooth protocol.

9. Define: Congestion.

10. What is Internet Control Protocol?

11. Mention the services of the transport layer.

12. What is the role of encryption in network security?

PART B — (5 × 5 = 25 marks)

Answer any FIVE questions.

13. Compare the Layers of OSI and TCP/IP models.

14. Explain the concepts of local loop and trunk tines.

15. Describe elementary data link protocols with examples.

16. Explain Bluetooth technology and its applications.

17. Write short notes on routing and addressing in IP.

18. Explain connection establishment and release in the transport layer.

19. Describe authentication and threats in network security.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

20. Explain the architecture and working of the OSI model.

21. Describe wireless transmission and the structure of telephone systems.

22. Explain the medium access control protocols and sliding window method.

23. Describe routing and congestion control strategies.

24. Write a detailed note on Internet Transport Protocols and cryptographic techniques.

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