MAY 2025

P/ID 17614/PCA4L/ PCAED/PIT3F

Time : Three hours Maximum : 80 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. What are the two types of transmission technology available?

2. Which OSI layers are the network support layers?

3. What is called guided transmission media?

4. What is attenuation?

5. What do you mean by half duplex mode of transmission?

6. What are the different types of switching techniques?

7. What is said to be an error in network?

8. Specify the reasons for congestion.

9. Where is routing table maintained?

10. What is stream socket?

11. What do you understand by "releasing a connection"?

12. What are the various types of security attacks?

PART B — (5 × 6 = 30 marks)

Answer any FIVE questions.

13. Write short notes on Network software.

14. Discuss on Guided transmission media.

15. Discuss on Digital modulation.

16. Explain about one bit sliding window protocol.

17. Explain the design issues of network layer.

18. Describe hierarchical routing algorithm with an example.

19. Discuss the need for Network security.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

20. Describe TCP/IP reference model with a neat sketch.

21. Explain Error detection and correction mechanism.

22. Discuss on medium access layer.

23. Explain the following:

    (a) Multicast routing

    (b) Link state routing

24. Discuss on Cryptographic principles.

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