

DECEMBER 2023

**P/ID 17614/PCA4L/
PCAED**

Time : Three hours

Maximum : 80 marks

PART A — ($10 \times 2 = 20$ marks)

Answer any TEN questions.

1. Write the types of transmission technology.
2. What are the elements of physical layer?
3. What are the categories of guided media?
4. List out the types of switching techniques.
5. What is meant by multiple access protocol?
6. What are carrier-sense protocols?
7. Write the meaning of each field in an IP address.
8. What do you mean by congestion?
9. What is meant by port address?
10. Differentiate between TCP and UDP.
11. Write a note on error control mechanism.
12. List out the security techniques in transport layer.

PART B — ($5 \times 6 = 30$ marks)

Answer any FIVE questions.

13. Discuss the need for Computer networks.
14. Explain any two multiplexing schemes.
15. Explain one bit sliding window protocol.
16. Write short notes on slotted ALOHA.
17. Explain congestion control algorithm.
18. Explain the various classes of IP address.
19. Describe the mechanism of TCP connection establishment.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

20. Explain Network Hardware and Software
21. Explain Error detecting codes with examples.
22. Discuss on Multiple Access protocols.
23. Explain any two Routing algorithms in detail.
24. What are the two types of cryptographic principles? Explain.