51335/SZ24A/ SE25A/SU26A

Time: Three hours

Maximum: 75 marks

PART A — $(10 \times 2 = 20 \text{ marks})$

Answer any TEN questions

- 1. Define: "Internet".
- 2. What are the functions of ATM?
- 3. Define the term "MAN".
- 4. What do you mean by radio transmission?
- 5. Write a note on flow control.
- 6. What is circuit switching?
- 7. Write down the channel allocation problem.
- 8. Mention the functions of medium access layer.
- 9. Give the purpose of broadcast routing.
- 10. What is traffic-aware routing?
- 11. What is the use of Berkeley sockets?
- 12. List out the two fundamental cryptographic principles.

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer any FIVE questions

- 13. Elaborate the need of Ethernet and wireless LANs.
- 14. What are the service primitives of Network software? Explain.
- 15. Describe the functions of medium earth orbit satellites.
- 16. Explain the structure of the telephone system with diagram.
- 17. Write down the simplex stop-and-wait protocol for a noisy channel.
- 18. What are the approaches to congestion control? Explain.
- 19. Summarize the transport services provided to the upper layers.

PART C —
$$(3 \times 10 = 30 \text{ marks})$$

Answer any THREE questions

- 20. Draw and explain the architecture of TCP/IP reference models.
- 21. Illustrate the implementation of error-correcting codes

- 22. Discuss the one-bit sliding window protocol.
- 23. Outline the distance vector routing with neat diagram.
- 24. Elaborate the connection release of transport protocols.