

25095

M.Sc. DEGREE EXAMINATION, APRIL 2018.

Computer Science

SECOND SEMESTER

Paper V — COMPUTER NETWORKS

Time : Three hours

Maximum : 75 marks

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each questions carries 3 marks.

1. Describe the uses of computer networks.
2. Give a brief note on the network hardware and network software.
3. What are the design issues of data link layer?
4. Describe the various protocols of data link layer.
5. Write about channel allocation problem.
6. What is switching in data link layer.
7. What are the design issues of network layer?
8. Illustrate the concept of internet working.

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Compare and explain the ISO OSI and TCP/IP reference models with a diagram.

Or

10. Explain with a suitable diagram the various transmission media of the physical layer.

11. What is the role of data link layer in the HDLC, ATM and INTERNET? Illustrate

Or

12. What is protocol verification? Explain about the sliding window protocols.

13. Discuss about the multiple access protocols of the medium access sublayer.

Or

14. Write a concise note on the following

(a) Ethernet

(b) Broadband wireless

(c) Bluetooth.

15. Explain about the routing algorithms of network layer.

Or

16. Write a short note on the following

(a) Congestion control

(b) Quality of service

(c) Role of network layer in the internet.

