

Sixth Semester B.Sc. Degree Examination, April/May 2019

(CBCS Scheme)

Computer Science

Paper T 6.3 – COMPUTER NETWORKS

Time : 3 Hours]

[Max. Marks : 90

Instructions to Candidates : Answers ALL the Sections.

SECTION – A

Answer any **TEN** of the following.

(10 × 1 = 10)

1. Define computer network.
2. Mention any one limitation of LAN.
3. What is topology?
4. How many layers are there in the OSI model?
5. Expand TCP/IP protocol.
6. What is DNS?
7. Expand FDDI.
8. Mention any one application of routers.
9. What is the use of UDP protocol?
10. What is congestion in network?
11. What is the function of a transmitter?
12. Mention any one type of transmission media.

Q.P. Code – 42640

SECTION – B

Answer any **FIVE** of the following.

(5 × 3 = 15)

13. Explain the types of networks.
14. With neat diagram explain the star and ring topology.
15. With protocol suit explain the TCP/IP model.
16. What is the use of following protocol :
 - (a) SMTP
 - (b) FTP
 - (c) TCP.
17. Briefly explain the hamming code.
18. Write a note on routing table.
19. What are multiplexing and demultiplexing? Define.

SECTION – C

Answer any **SIX** of the following.

(6 × 5 = 30)

20. Explain the peer-to-peer and client server model in networks.
21. Explain the different types of IP address.
22. What are the components of HTTP protocol?
23. What do you mean by error detection and correction codes? Explain.
24. Explain routing-routing model.
25. How the QOS of the network improved when high congestion occurs?
26. Explain the fundamentals of cellular transmission.
27. Write a note on wireless networks generation.

SECTION – D

Answer any **FIVE** of the following.

(5 × 7 = 35)

28. (a) Explain how data is represented in network. (3)
(b) Explain WLAN and MAN networks. (4)
29. With neat protocol suite explain the OSI model. (7)
30. (a) Explain Telnet architecture with block diagram. (5)
(b) What is cryptography? (2)
31. (a) Explain sliding window protocol. (3)
(b) What is the use of FDDI in network? Explain. (4)
32. (a) Why routing algorithm used in networks? (2)
(b) With neat block diagram explain IPv4 format. (5)
33. (a) What do you mean by sockets in transport layer? Why it is used? (2)
(b) Explain any two transmission modes. (2)
(c) Write the UDP format and explain. (3)
34. (a) What are the transmitter and receive technique used in networks. (4)
(b) Write a note on wireless transmission protocols. (3)
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