

Roll No.....

Total Pages: 3
1254

BCA/D-17
COMPUTER NETWORKS
Paper: BCA-354

Time: Three Hours

Maximum Marks: 80

Note: Attempt five questions in all, Q. No.1 is compulsory. In addition to compulsory question, student will have to attempt four more questions selecting one question from each Unit. All questions carry equal marks.

Compulsory Question

1. (a) Write a short note on Frame Relay.
(b) Explain different types of Computer Network.
(c) What do you mean by Wireless LAN?
(d) Write a short note on Cable Modem.
(e) What is Load Shedding? Explain.
(f) Write a short note on Digital Certificate.
(g) Write a short note on Gigabit Ethernet.

Unit-I

2. Discuss OSI reference model in detail. Also discuss advantages and disadvantages of OSI model.
3. (a) Discuss Connection-oriented and Connectionless Services with examples.
(b) Discuss any four network hardware components.

Unit-II

4. (a) What do you mean by Multiplexing? Explain different types of Multiplexing techniques.

(b) What do you mean by transmission media? Explain unguided media in detail.
5. Discuss modulation in detail. Also discuss different types of modulation techniques with advantages and disadvantages of each technique.

Unit-III

6. (a) What do you mean by framing in networking? Discuss different framing methods.

- (b) Discuss Carrier Sense Multiple Access (CSMA) in details
- 7. (a) Explain Hamming code for error detection and correction.
(b) Discuss sliding window protocol in detail.

Unit-IV

- 8. What do you mean by Routing? Discuss different types of routing algorithm with its advantages.
- 9. Explain congestion and causes of congestion. Also discuss different congestion control algorithms in detail.