

7. Describe various network hardware components.

Unit-IV

8. What do you mean by routing ? Explain shortest path routing and distance vector routing algorithm.
9. (a) What do you mean by congestion? How do we control the congestion ? Explain.
(b) What do you mean by cryptography? Describe encryption method.

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Roll No.

97679

B.C.A. 5th Semester (New)
Examination- November, 2016
Data Communication and Networking

Paper-BCA-303

Time : 3 hours

Max. Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : Attempt **five** questions in all, selecting **one** question from each unit. Q.No. 1 is **compulsory**. All questions carry equal marks.

1. (a) What is web based model?
(b) What is frame relay ?
(c) What is multiplexing ?

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(1)

[Turn Over

- (d) What is the difference between asynchronous and synchronous transmission?
- (e) What is wireless LAN ?
- (f) What is Token Ring ?
- (g) What is datagram?
- (h) What are the network security issues?

Unit-I

- 2. What do you mean by ISO-OSI reference model ? Explain functions, services and protocol of each layer.
- 3. (a) Define computer network ? What is network topology ? Explain it with their advantages and disadvantages.

- (b) Explain :
 - (i) Distributed system
 - (ii) Peer-to-peer model.

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Unit-II

- 4. (a) What is switching ? What are different types of switching mechanisms ? Explain.
- (b) Explain : Bid Rate, Baud Rate, Bandwidth and Channel.

5. Explain :

- (a) Modulation techniques
- (b) Transmission Media

Unit-III

- 6. (a) Explain different types of error detection techniques.

- (b) Explain:
 - (i) VLAN
 - (ii) FDDI.

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