

Total No. of Questions : 8] [Total No. of Printed Pages : 3]

Paper Code : 21322

F-422

B.C.A. (Fifth Semester) Examination, 2021

(New Course)

Paper-BCA-502-N

COMPUTER NETWORK

Time : Three Hours]

[Maximum Marks : 70

Note : Attempt any five questions. All questions carry equal i.e. 14 marks. Symbols are used have their usual meanings.

1. ✓ What is OSI model? List all the layers of OSI model and also write two function of each layer. 14

2. (a) Write the importance of TDM? What are the applications of TDM? Also write its disadvantages (if any). 7

(1)

P.T.O.

(b) Explain Go-back-N sliding window protocol. 7

3. (a) Differentiate between packet switching and circuit switching. 7

(b) What is ATM? What are its benefits? Explain. 7

4. ✓ (a) Differentiate between twisted pair, coaxial cable, and fiber optics. 7

✓ (b) What is meant by simplex & half duplex communication system? Give example representing each. 7

5. ✓ (a) Describe error-detection and correction techniques. 7

✓ (b) What is cyclic redundancy check? 7

6. (a) Describe the following with respect to transport layer:
(i) QOS (Quality of Service).
(ii) Connection Establishment.
(iii) Flow control and buffering. 7

(b) What are the following standards: 7

IEEE 802.3, IEEE 802.4, AND IEEE
802.5

How do they differ in terms of network to-
pologies and access methods? Explain.

7. ✓(a) Why is multiplexing needed in data com-
munication system? Briefly explain TDM
and FDM. 7

✓(b) What is a Gateway? How do X.25 gate
ways link hosts and LANs? Explain. 7

8. ✓ Write short notes on any four: 14

- (i) Wireless Communication.
- ✓(ii) OSI Model.
- ✓(iii) CSMA/CD.
- ✓(iv) Domain name system.
- ✓(v) Bridge.