

U.G. 5th Semester Examination 2021

Computer Application (B.C.A)

(Honours)

Paper Code : DC-11

Data Communication and Networking

[CBCS]

Full Marks: 32

Time: 2 hours

The figures in the margins indicate full marks.

Group - A

1. Answer any six questions: 2×6=12
- (a) What is RARP?
 - (b) Write the name of protocols available in transport layer of TCP/IP model.
 - (c) What is Bandwidth?
 - (d) Write the functions of the network layer in OSI model.
 - (e) Find the first address of the following address: 112. 23.34.24/4.
 - (f) What is distortion?
 - (g) Find the maximum data rate of a noiseless channel with a bandwidth of 4000 Hz transmitting a signal with four signal levels.

Group – B

Answer any two questions 10×2=20

2. (a) Explain TDM with an example.
- (b) Draw the digital signal corresponding to the following digital data using NRZ-L and NRZ-I schemes.
- 10010111
- (c) Differentiate between physical and logical address. 4+4+2=10
3. (a) Find the Hamming code for the following data:
- (1100110)₂
- (b) Explain port address.
- (c) Differentiate between guided media and unguided media. 4+3+3=10
4. (a) Explain FM modulation technique.
- (b) Explain Checksum with an example.
- (c) What is DHCP? 4+4+2=10