2022

BCA (Honours)

Paper Code : DC-11

[Data Communication and Networking]

(CBCS)

Full Marks : 32 Time : Two Hours

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

Group - A

1. Answer any *six* questions : 2×6=12

(a) Explain FTP briefly.

(b) What is protocol?

(c) Find the number of hosts possible of the following address 32.152.10.193/26.

(d) Differentiate between simplex and half duplex.

(e) Find the first and last address of the following IP : 112. 53.34.28/27.

(f) What is Shannon capacity?

(g) What is Data rate?

P.T.O.

Group - B

Answer any *two* questions : 10×2=20

2. (a) Explain ASK briefly.

   (b) Draw the digital signal corresponding to the following digital data using RZ and Differential Manchester schemes.

   10001011

   (c) Differentiate between circuit switching and datagram networks. 4+4+2=10

3. (a) Find the Hamming code for the following data using even parity :

   $(1100110)_2$

   (b) Explain the functionalities of DHCP.

   (c) Differentiate between guided media and unguided media. 4+3+3=10

4. (a) Explain PCM briefly.

   (b) Explain Checksum with an example.

   (c) What is transmission impairment? 3+4+3=10
