2022
BCA (Hons)
B.Sc. Third Semester End Examination - 2022
PAPER - C7T

Full Marks : 40   *Time : 2 hours*

The figures in the right-hand margin indicate marks.
Candidates are required to give their answers in their own
words as far as practicable.
Illustrate the answers wherever necessary.

Group-A

A. **Answer any five questions of the following :   5×2=10**

1. What is data communication? What are the necessary components of data communication?

2. Compare between digital signal and analog signal.

3. What are period and frequency in data communication.

4. What is the relation between bit rate and baud rate?

5. What is wave length? How do we represent wave length?

6. What is framing? Explain different types of framing.

7. What is the advantage of IPV6 over IPV4.

8. Explain briefly about Pulse code modulation (PCM) technique.

Group - B

B. Answer any four questions of the following :   4×5=20

1. Explain different types of topology.

2. Explain FDM and TDM with proper diagram.

3. Describe the operation for ACK damage/loss in Go-Back-N ARQ.

4. Write about the mechanism of pure ALOHA.

5. Describe classful addressing of logical address.

6. How communication happen over circuit switch network? Compare between circuit switch and packet switch network?

7. What do you understand by subnetmask of the 198.10.10.0/27? How many subnets are in this network? How many host are there in this each subnet?   1+2+2

Group - C

C. Answer any one question of the following :   1×10=10

1. a) What is bandwidth?

   b) A signal travels from point A to point B, at point A the signal power is 100 w. At point B the power is 90w. What is the attenuation in decible?

   c) Draw the graph of the NRZ-L scheme for 01010101 and 00110011.   2+3+5

2. Compare between TCP and UDP protocol? Why UDP is called connectionless protocol? Explain the three way handshaking in TCP? Explain the basic approach of error detection technique.   2+2+3+3

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