

H Roll No.

TBC-301

B. C. A. (THIRD SEMESTER)

MID SEMESTER EXAMINATION, 2022

**DATA COMMUNICATION AND COMPUTER
NETWORKS**

Time : 1½ Hours

Maximum Marks : 50

Note : (i) Answer all the questions by choosing any *one* of the sub-questions.

(ii) Each question carries 10 marks.

1. (a) Explain the different topologies of network with suitable example and neat and clean diagram. (CO1)

OR

- (b) Explain Digital to Analog conversion techniques with example. (CO2)

2. (a) Discuss the data communication components with a neat and clean diagram and proper example. (CO1)

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(2)

OR

- (b) Explain the various transmission media with their features. (CO2)
3. (a) Explain different modes of communication with diagram. (CO1)

OR

- (b) Discuss the various switching techniques with proper diagrams. (CO2)
4. (a) Discuss the PCM technique with a neat and clean diagram. (CO2)

OR

- (b) Define computer network. Explain different advantages and applications of computer networks. (CO1)
5. (a) Why do we need encoding ? Draw the Signals using Manchester and differential Manchester for the string 10110110. Give proper example. (CO1)

OR

- (b) Explain different categories of networks.

(CO1)