

Instructions: 1) All questions are compulsory.

2) Figures in rounded() brackets within the question, indicate the scheme of marking for respective part of the question, whereas, figures in the first right column indicate total marks for that whole question.

3) CO is the index number of the Course Outcome statement.

4) The Bloom's taxonomy level (BL) for 1,2,3,4,5 and 6 is remember, understand, apply, analyze, evaluate and create respectively.

5) Assume suitable data if necessary.

6) Use of non-programmable calculators is allowed

			Marks	BT Level	COs
Q.1	Attempt any Three questions				
	A	Define data communication. [1M] List the five main elements involved in data communication. [5M]	6	1	1
	B	Explain the difference between simplex[2M], half-duplex [2M], and full-duplex [2M] transmission with examples.	6	2	2
	C	Describe the characteristics of each type of network.	6	2	1
	D	Explain why protocols [3M] and standards [3M] are necessary for network communication.	6	2	1
Q.2	A	Summarize how the OSI model organizes network communication into different layers. [5M] with neat diagram. [2M]	7	2	2
OR					
	B	Explain the role of the Internet and discuss its significance in today's world.	7	2	1

