Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India (Autonomous College Affiliated to University of Mumbai)

Mid Semester Examination Synoptic March 2019

Max. Marks: 20 Class: F.Y.MCA

Course Code: MCA22

Name of the Course: Computer Networks

Duration: 1Hrs Semester:II

Branch: MCA

Instruction:

(1) All questions are compulsory

(2) Draw neat diagrams

(3) Assume suitable data if necessary

Q No.		Max.	CC
Q.1 (a)	Consider a noiseless channel with a bandwidth of 3000 Hz transmitting a signal with 2 signal level. Calculate maximum bit rate? • 1 Marks for Nyquist Bit Rate Defination. • 1 Marks for formula:- Bit - Rate = 2 * bandwidth * log ₂ L where L is level.	Marks 4	1
	• 2 Marks for calculations:- $Bit - Rate = 2 * 3000 * log_2 2 = 6000bps$	0	
Q.1 (b)	Describe various transmission impairments	4	1
	• 1 marks for transmission impairments explanation.		
	• 1 marks listing various transmission impairment.		
	• 2 marks explaining in brief.		
	OR		
	Illustrate Signal propagation with neat block diagram		
	1 marks for Signal propagation explanation	4	
	• 1 marks for block diagram		
	• 2 marks for block diagram explanation		

Q.2	Illustrate Star, Bus and Ring Topology with Advantage and Disadvantages?	6	-	2
	• 1 marks for Topology explanation			
	• 1 marks for Diagram for each Topology with labeling component			
	• 2 marks for explanation of each topology			
	• 2 marks for Advantages and Disadvantages of each topology.			
	OR			
	List the different types of Communication and Mode of Communication. Explain with Neat Diagram.	6		
	• 2 marks Listing and Explanation Type of Communication	, a		
	• 2 marks Listing and Explanation Mode of Communication			100*
	• 1 marks each for diagrams			
Q.3	Compare ISO-OSI and TCP/IP Model with neat diagram • 1 marks Diagram for each diagram OSI and TCP/IP. • 1 marks Definitions for each OSI and TCP/IP.	6	0	3
	• 2 marks for Comparison.			Ä.