Sardar Patel Institute of Technology
Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India
(Autonomous College Affliated to University of Mumbai)

Makeup Semester Examination
July ~~March~~ 2019

Max. Marks: 60
Class: F.Y.MCA
Course Code: MCA22
Name of the Course: Computer Networks

Duration: 3Hrs
Semester:II
Branch: MCA

Instruction:
(1) All questions are compulsory
(2) Draw neat diagrams
(3) Assume suitable data if necessary

Q No.		Max. Marks	CO
Q.1 (a)	It is required to transmit a data at a rate of 64 kbps over a 3 kHz telephone channel .Calculate SNR ratio.	6	1
Q.1 (b)	Can you distinguish Transparent Bridge and Source Routing Bridge with neat diagram	6	1
Q.2 (a)	Illustrate working of any one Switching Technique OR List the different type of Wireless media ,Illustrate concept of any wireless media in brief.	6	2
Q.2 (b)	For each of following network explain the consequences if connection fails. 1. Six devices arrange in Bus topology 2. Four devices arrange in Ring topology 3. Five Devices arrange in Mesh topology	2 2 2	2
Q.3 (a)	Illustrate Selective Repeat ARQ Technique for Flow Control in Data Link Layer OR Compare Stop and Wait & Go Back N ARQ protocols with neat diagram	6	3

Q.3 (b)	A Seven bit Hamming code is received as 1110101.What will be the correct code?	6	3
Q.4(a)	Consider the following bit stream 1100011, 11110011, 10110010 , 00001010 perform VRC and LRC Error Detection Technique	6	3
Q.4(b)	1. Is it possible for an application to enjoy reliable data transfer even when the application runs over UDP? If so, how? 2. Suppose Host A sends two TCP segments back to back to Host B over a TCP connection. The rst segment has sequence number 90; the second has sequence number 110. (a) How much data is in the rst segment? (b) Suppose the rst segment is lost but the second segment arrives at B. In the acknowledgement that Host B sends to Host A, what will be the acknowledgement number? OR List and illustrate events involved in TCP Connection	3 3	4
Q.5(a)	Explain the concept of Network Address Translation in breif	6	3
Q.5(b)	Illustrate RED algorithm in brief OR List and illustrate types of message in DNS and the three main division of domain space	6	3