

## Sardar Patel Institute of Technology



Duration: 90 Min

Branch: Electronics

Semester: VI

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

## Mid Semester Examination

March-14/03/2018

Max. Marks: 30

Class: T.E.

Course Code: ETC603

Telecommunication

: ETC603

Name of the Course: Computer Communication Telecom Network

Instruction:

(1) All questions in Q1 is compulsory

(2) Draw neat diagrams

Q No.		Max. Marks	CO
Q.1 (a)	Explain the role of Network layer in OSI model	2	CO1
Q.1 (b)	Compare between slotted ALOHA and pure ALOHA	2	CO2
Q.1 (c)	BGP is known as Exterior routing protocol , justify	2	CO3
Q.2 (a)	A packet has arrived with in which the offset value is 100. The value of HLEN is 5 and value of total length field is 100. What is the number of first byte and last byte?	6	CO3
Q.2 (b)	Explain strategy which is suitable when two computers using IPv6 want to communicate with each other and packet must pass through IPv4 region.	6	CO3
	OR  An IP datagram has arrived with following information in the header(in hexadecimal) 45 00 00 54 00 03 00 00 20 06 00 00 7C 4E 03 02 B4 0E 0F 02  a. Are there any options? b. Is the packet fragmented? c. What is the size of data? d. Is a checksum used? e. How many router can		
Q.3 (a)	the packet travel to? f. What is type of service?  Describe the steps of distance vector routing with example.	6	CO2
Q.3 (b)	Classify Multiple access protocol and explain the working principle of CSMA/CA	6	CO2
	OR		
	List the role of data link layer. Draw Sublayer of data link layer and explain the function of sublayer	6	CO2