



# Sardar Patel Institute of Technology

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

Re-exam (2017-18)

## End Semester Examination

Max. Marks: 100

Class: T.E.

Course Code: ETC603

Name of the Course : Computer Communication Telecom Networks

Duration: 3Hrs

Semester: VI

Branch: Electronics and Telecommunication Engg.

### Instructions:

- (1) All Questions are Compulsory
- (2) Draw neat diagrams
- (3) Assume suitable data if necessary

Question No.		Max. Marks	CO
Q1a)	Discuss the role of different layers of OSI	10	CO1
Q1b)	Draw and explain with neat sketch of TCP/IP protocol suit with different layer wise protocol. <b>OR</b> Explain unicast, multicast, broadcast with example of IP address	05	CO1
Q1c)	Explain the working principle of basic model of TFTP	05	CO1
Q2a)	Compare between TCP and UDP protocol <b>OR</b> Compare between circuit switching and packet switching	05	CO4
Q2b)	Describe the steps of connection establishment in 3 way handshaking in TCP	10	CO4
Q2c)	What do you mean by congestion control? explain any one mechanism to control the congestion	05	CO4
Q3a)	What do you mean by peer to peer communication? Explain working principle of peer to peer file sharing protocol. <b>OR</b> Name the protocol that map domain name to IP address? Draw and Explain packet format of that protocol.	10	CO5





Q3b)	What do you mean by socket address? Explain with example. Define the role of socket programming.	05	CO5
Q3c)	Discuss the working principal of SMTP	05	CO5
Q4a)	Classify unicast routing protocol. Give the role of each field of packet format of OSPF	05	CO3
Q4b)	<p>Evaluate the shortest path tree for node B using Dijkstra's algorithm.</p> <p style="text-align: center;"><b>OR</b></p> <p>Compare and contrast between distance vector algorithm and Link state algorithm.</p>	10	CO3
Q4c)	Justify that BGP is exterior protocol	5	CO3
Q5a)	How the collision is avoided using CSMA /CA mechanism?	5	CO2
Q5b)	<p>Give the Physical-layer Services of following</p> <p>a)Wi Max   b)Optical fiber</p> <p style="text-align: center;"><b>OR</b></p> <p>a)Frequency Division Multiplexing   b) Time Division Multiplexing</p>	10	CO2
Q5c)	Compare between HUB, Bridge and Router	5	CO2