



Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058, India

(Autonomous College Affiliated to University of Mumbai)

End Semester Examination

Nov/Jan 2018-19

Max.Marks: 60

Class: B.E.

Course Code: EXC704

Name of the Course: Computer Communication and Networks

Duration: 3Hrs

Semester: VII

Branch: ETRX

Instruction:

- (1) All questions are compulsory
- (2) Draw neat diagrams wherever required
- (3) Assume suitable data if necessary
- (3) CO – Course Outcomes

| Q No. | | Max. Marks | CO |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----|
| Q.1 (a) | Define 1) Multiple Access 2) Multiplexing. Compare TDM and FDM. | 05 | CO1 |
| Q.1 (b) | Discuss the difference between Pure Aloha and Slotted Aloha. What is CSMA-CD mechanism? Discuss in brief. | 10 | CO1 |
| OR | | | |
| Q.1 (b) | Compare 1) LEO, MEO and GEO orbiting satellites 2) TCP/IP model and OSI reference model. | 10 | CO1 |
| Q.2 (a) | Discuss the main elements of Web email. | 05 | CO5 |
| Q.2 (b) | With reference to flow control, brief out on the following mechanisms 1) Simple Automatic Repeat Request (ARQ) 2) Stop and Wait ARQ. | 10 | CO2 |
| Q.3 (a) | What is Quality of Service (QoS)? Define and discuss various metrics that define QoS flow characteristics. | 05 | CO4 |
| OR | | | |
| Q.3 (a) | Distinguish between Connection Oriented and Connection-less protocols. | 05 | CO4 |
| Q.3 (b) | Consider the following 4 flows sharing a common bottle neck link: <div style="text-align: center;"> </div> <p>Compute the fair share of each unsatisfied flow using Max-Min Fairness algorithm.</p> | 10 | CO4 |
| Q.4 (a) | Define routing. Compare between static, dynamic and default routing mechanisms. | 05 | CO3 |

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|---------|---------------------------------------------------------------------------------------------------------|----|-----|
| | OR | | |
| Q.4 (a) | What is Subnetting? Discuss the role of Subnet Mask in finding the network-id using a relevant example. | 05 | CO3 |
| Q.4 (b) | Define 1)cookies and 1)cache. What is a Web Cache? Discuss in brief the significance of web cache. | 10 | CO5 |

—————Best of Luck—————