Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
ME – SEMESTER – II (New)– EXAMINATION – WINTER-2019

Subject Code: 3720513   **Date: 19-11-2019**

Subject Name: Advanced Communication Networks

Time: 02:30 PM TO 05:00 PM   **Total Marks: 70**

Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Explain TCP congestion control in detail. Also explain congestion window, Slow start, AIMD, TCP tahoe and TCP reno.	**07**
	(b)	Describe Leaky bucket algorithm and its properties.	**07**
Q.2	**(a)**	Explain ATM in detail. Describe it's layer in detail. Give reason why one of the layer is known as ¾ layer?	**07**
	(b)	Explain packet scheduling algorithm.	**07**

OR

	(b)	Explain integrated service model with diagram	**07**
Q.3	**(a)**	Explain WFQ and rate proportional algorithm.	**07**
	(b)	Explain TCP/IP flow control algorithm and fairness issues.	**07**

OR

Q.3	**(a)**	Draw and explain diffserv architecture and framework.	**07**
	(b)	Explain Characterization of traffic by Linear bounded arrival processes.(LBAP)	**07**
Q.4	**(a)**	Compare RED and WRED. Explain RED in detail.	**07**
	(b)	Write a note on RSVP protocol.	**07**

OR

Q.4	**(a)**	Explain packet classification algorithm and flow identification.	**07**
	(b)	Write a note on IP address lookup challenges.	**07**
Q.5	**(a)**	Compare IPV4 and IPV6. Explain in detail IPV4 with its header.	**07**
	(b)	Explain Traffic Engineering issues in MPLS.	**07**

OR

Q.5	**(a)**	Explain MPLS protocol. Describe its framework and Architecture.	**07**
	(b)	What is the meaning of effective bandwidth? Explain importance of admission control in internet.	**07**

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