Sea	ıt No.:	: Enrolment No		
		GUJARAT TECHNOLOGICAL UNIVERSITY ME – SEMESTER II (NEW) – • EXAMINATION – SUMMER 2016		
Su	bject	t Code: 2720507 Date: 31/05/20	Date: 31/05/2016	
Tiı	ne: 1 truction 1.	t Name: Data Communication and Networking 0:30 am to 01:00 pm Total Marks: ons: . Attempt all questions Make suitable assumptions wherever necessary Figures to the right indicate full marks.	70	
Q.1	(a)	Explain OSI reference model in detail. Discuss it's critiques.	07	
	<b>(b)</b>	Do as directed:  1) Define: Active Topology, Router, Baud rate 2) Why the IEEEE 802.13 standard does not exist? Compare IEEE802.3 and IEEE802.5.	03 04	
Q.2	(a)	What is CSMA? Describe CSMA/CD & CSMA/CA protocols in detail with examples.	07	
	<b>(b)</b>	Explain Cable Modem with diagram. Compare ADSL and Cable Modem.  OR	07	
	<b>(b)</b>	Framing is function of which layer from OSI reference model? Explain those framing techniques.	07	
Q.3	(a)	Explain the significance of window size in sliding window protocols using example. Also state the maximum window size of Go-Back n protocol and Selective Repeat protocol.	07	
	<b>(b)</b>	Differentiate IPv4 and IPv6. Explain Header of IPv6 with diagram.  OR	07	
Q.3	(a) (b)	Explain the Leaky bucket algorithm and Token bucket algorithm in detail. Explain the Bluetooth architecture and Bluetooth frame structure in brief.	07 07	
Q.4	(a)	What is Domain Name System? Describe in details the Recourse records and Name server for the Domain Name System	07	

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**(b)** Which are the methods used for Digital Signature? Explain them in detail.

What is hidden station and exposed station problem in wireless LAN? Explain

Compare and contrast the static and dynamic routing with examples. Describe the

**(b)** Explain the Internet transport protocol: UDP in detail.

Explain H.323 protocol stack. Compare it with SIP.

Explain two fundamental cryptography principles in detail.

link state routing algorithm in detail.

Explain the SMTP and HTTP protocol.

**Q.4** 

**Q.5** 

**Q.5** 

(a)

(a)

(a)

**07** 

**07** 

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