Seat No.: _____ *Enrolment No._____*

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – I • EXAMINATION – SUMMER • 2014

Subject code: 710309N **Date: 24-06-2014**

Subject Name: Industrial Data Communication

Time: 02:30 pm - 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 connection-oriented and connectionless services with suitable examples.	**07**
	(b)	Compare OSI and TCP/IP reference Models.	**07**
Q.2	**(a)**	Write short note on Ethernet cabling.	**07**
	(b)	Explain D-AMPS for second generation mobile phones.	**07**
		OR	
	(b)	Explain CDMA technology used for mobile communication in detail.	**07**
Q.3	**(a)**	Explain Go back N protocol in detail.	**07**
	(b)	Explain simplex stop and wait protocol.	**07**
		OR	
Q.3	**(a)**	Write short note on Petri net models.	**07**
	(b)	Explain sliding window protocol in detail.	**07**
Q.4	**(a)**	Explain CSMA with collision detection.	**07**
	(b)	Explain switched Ethernet with its example.	**07**
		OR	
Q.4	**(a)**	Explain the frame structure of 802.11 protocol.	**07**
	(b)	What is Bluetooth? Explain its architecture with applications.	**07**
Q.5	**(a)**	Explain Distance vector routing with its count to infinity problem.	**07**
	(b)	Give comparisons between virtual-circuit and datagram subnets.	**07**
		OR	
Q.5	**(a)**	Explain different congestion prevention policies.	**07**
	(b)	Explain hop-by-hop choke packets in detail.	**07**

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