## GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER- II(New course) • EXAMINATION (Remedial) - WINTER- 2015

Subject Code: 2720507Date: 11/12/2Subject Name: Data Communication and NetworkingTime:2:30 pm to 5:00 pmInstructions:Total Marks				
Q.1	(a) (b)	Which are the different physical layer standards? Explain any two in detail. Explain ADSL in detail.	07 07	
Q.2	(a) (b)	Explain OSI reference model also discuss it scritiques. Explain Cable Modem with diagram. Compare ADSL and Cable Modem. OR	07 07	
	(b)	Which are the different framing techniques in Data Link layer? Explain those techniques.	07	
Q.3	<b>(a)</b>	Explain the Go-Back-N and selective repeat protocols in brief. Comment on the effects of errors caused in communication due to different window sizes.	07	
	(b)	Discuss IEEE 802.4, IEEE 802.5 and IEEE 802.11 standards. OR	07	
Q.3	<b>(a)</b>	Explain the Bluetooth architecture and Bluetooth frame structure in brief.	07	
	(b)	Enlist the function of the transport layer and explain each in brief. Compare and contrast UDP and TCP.	07	
Q.4	<b>(a)</b>	Draw IPV4 header format and explain the each field of the header. Also explain the concept of fragmentation in detail.	07	
	(b)	Explain the SMTP and HTTP protocol. OR	07	
Q.4	(a) (b)	Write in detail about Leaky Bucket and Token Bucket Algorithm. Discuss various social issues related to security over Internet.	07 07	
Q.5	(a)	Explain DNS in detail with example.	07	
	<b>(b)</b>	Explain the Transport Service Primitives. Explain using diagram, connection establishment and release using these primitives. OR	07	
Q.5	(a) (b)	Which are the methods used for Digital Signature? Explain them in detail. Write in detail: (I) RSA algorithm. (II) Transposition cipher.	07 07	

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