GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-IV • EXAMINATION – WINTER • 2014 Subject Code: 141601 Date: 22-12-2014			
	_	Name: Data Communication and Networking	
7	Fime: 02	2:30 pm - 05:00 pm Total Marks: 70	
Q.1		Discuss Protocols and Standards. List and explain the most important criteria's which a network must be able to meet.	07
	(b)	List different connecting devices based on the layer in which they operate in a network and explain them in detail.	07
Q.2	2 (a) (b)	Explain TCP/IP Protocol Suite in detail. Describe Analog to Digital Conversion.	07 07
	(b)	OR Describe Analog to Analog Conversion.	07
0.4			
Q.3	(a) (b)	Explain the duties of transport layer and session layer. Describe Link state routing with example. OR	07 07
Q.3	(a) (b)	Explain Frequency division multiplexing. Also describe multiplexing applications. Describe Distance vector routing with example. Also explain split horizon and poison reverse.	07 07
Q. 4	(a) (b)	poison reverse. Explain types of transmission impairment in detail. Also discuss Shannon capacity. What is Switching? Describe Circuit switched networks.	07 07
		OR	
Q. 4	(a) (b)	Describe Guided Media and Unguided Media in detail. Discuss Ethernet and Composite signals in detail.	07 07
Q.5	(a) (b)	Explain 56K Modems and Cable Modems. Describe Checksum in detail with example. OR	07 07
Q.5	(a) (b)	Explain Cyclic Redundancy Check with example. Define the term topology. Describe Star, Bus and Mesh topology.	07 07
