Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY ME - SEMESTER II - EXAMINATION - WINTER - 2016

Su	hiect	Code: 2720507 Date: 21/11/20	16
Su Tii	bject me: 2	Name: Data Communication and Networking 2:30 pm to 5:00 pm Total Marks:	
Ins	2.	Attempt all questions.	
Q.1	(a) (b)	Draw the ISO OSI model and describe the tasks of all its layers. Draw IPV4 header format and explain the each field of the header. Also explain the concept of fragmentation in detail.	07 07
Q.2	(a) (b)	Explain ADSL in detail. Explain SMTP and HTTP protocol. OR	07 07
	(b)	Enlist all CSMA protocols and describe CSMA/CD and SCMA/CA protocols.	07
Q.3	(a) (b)	Write a short note on domain naming system functioning. What is difference between TCP and UDP? Explain the TCP header and working of TCP protocol.	07 07
0.2		OR	0.
Q.3	(a) (b)	Explain DES and Triple DES. What is Bluetooth? Explain Bluetooth protocol architecture and list its application.	07 07
Q.4	(a) (b)	Write in detail (i) Hierarchical Routing (ii) Count to infinity problem. Explain 1 bit Sliding window protocol. OR	07 07
Q.4	(a) (b)	Describe HDLC protocol. Compare 802.11 and 802.16 IEEE standard.	07 07
Q.5	(a)	What is channel allocation problem? Compare pure ALOHA and Slotted ALOHA.	07
	(b)	Write a detailed note on Leaky bucket and Token bucket algorithm. OR	07
Q.5	(a)	Compare Circuit switching, Message switching and Packet switching with necessary examples.	07
	(b)	What is Digital Signature? List the methods used for Digital Signature and explain them in detail.	07
