Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER-I(New course) • EXAMINATION - WINTER- 2015

Subject Code: 3715303 Date: 04/01		2016		
Subject Name: Wireless Communication and Mobile Computing Time: 2:30 pm to 5:00 pm Instructions: Total Mark			s: 70	
	2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a)	Draw and write IEEE 802.11 MAC frame structure with its control field and their significance.	07	
	(b)	Explain Cellular architecture.	07	
Q.2	(a) (b)	Write short note on: MAC management of IEEE 802.11 Give advantages of Bluetooth technology. Explain Bluetooth protocol stack architecture.	07 07	
	(b)	OR Explain Large scale and Small scale fading channel models.	07	
Q.3	(a) (b)	Explain MAC and Routing Protocols for IEEE 802.11 Wireless Mesh Networks Explain Piconet and Scatternet management in Bluetooth Networks	07 07	
Q.3	(a) (b)	OR Explain QoS support extended by IEEE 802.11e EDCA. Explain how packets intended for mobile host is intercepted by Home Agent in Mobile IP. Also discuss Proxy ARP. How Gratuitous ARP works?	07 07	
Q.4	(a)	Compare performance of conventional TCP with any of the TCP version proposed for wireless Network.	07	
	(b)	Explain timing synchronization function in Infrastructure mode of Wireless LAN. OR	07	
Q.4	(a) (b)	Draw IEEE 802.11 MAC state transition diagram & explain. Explain Scheduling in Bluetooth Networks	07 07	
Q.5	(a) (b)	Explain DS-CDMA transmitter and receiver design. Explain Dynamic Random Access for Wireless LAN with Multipacket Reception	07 07	
Q.5	(a)	OR What is Throughput Analysis of the IEEE?How power saving is achieved by IEEE 802.11 standard?	07	
	(b)	Explain multi–carrier CDMS and OFD performance analysis.	07	
