Seat No.:	Enrolment No
GUJARAT TECHNOLOGICAL UNIVERSITY M.E SEMESTER-I • EXAMINATION – WINTER 2013	
Subject Code: 2715303 Subject Name: Wireless Networks and Mobile C	Date: 30-12-2013
Time: 10.30 To 13.00 Instructions:	Total Marks: 70
 Attempt question 1, which is compulsory and answer Make suitable assumptions wherever necessary. Figures to the right hand indicate the marks. 	r any five from the rest questions.
 Q. No. 1 a. Define CDMA? b. What is FDD? c. What is the use of SDMA? d. Mention two access methods of IEEE 802.11 wireless 	[2 Marks X 10 = 20 Marks] as local area network.
 e. Define DCF? f. Define extended service set? g. Mention two ways defined by The 802.11 MAC to conclude the service in the service of the servi	oordinate use of the wireless medium.
 Q. No. 2 a. Discuss deficiencies IEEE 802.11 in Multihop Adhoc Networks. [5 Marks] b. In the Distributed Coordination Function DCF protocol of IEEE 802.11, why does a Node wait only SIFS time units (after the last data packet reception) before sending an ACK, while waiting DIFS time units before attempting a data transmission? [5 Marks] 	
Q. No. 3a. What are the advantages and problems of forwarding regarding security and power saving?b. What are the functions of various parts of the PHY la	[5 Marks]
Q. No. 4 a. Explain IEEE802.11 frame structure. b. How power saving is achieved by IEEE 802.11 sta	[5 Marks] andard? [5 Marks]
 Q. No. 5 a. In the IEEE 802.11 standard, explain the purpose of diagram to show the relationship among the intervals b. Explain different types frames generated in video end 	s. [6 Marks]
Q. No. 6 Explain timing synchronization function in Infrastructure	e mode of Wireless LAN. [10 Marks]
Q. No. 7	and the formation DCE and DCE

In the IEEE 802.11 standard, define and describe the two modes of operation: DCF and PCF. What kinds of traffic (real-time or non-real-time) are best supported by each mode of operation.

[10 Marks]

Q. No. 8

Explain how WLAN supports differential handling of frames in IEEE802.11e [10 Marks]
