Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – I • EXAMINATION – WINTER 2012

Subj	ect c	ode: 710601N Date: 16-01-2013	}
Time	: 02.	Tame: Wireless and Mobile Communication 30 pm – 05.00 pm Total Marks: 70)
Instr			
	2. I	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a)	What is cellular Concept? How it is utilized to improve the capacity of Mobile Communication System.	07
	(b)	Discuss the advantages of CDMA technology. Why orthogonal codes are used in CDMA mobile?	07
Q.2	(a)	Draw the block diagram of GSM network Architecture indicating main subsystems and its components and explain in Detail.	07
	(b)	· · · · · · · · · · · · · · · · · · ·	07
	(b)	What is Bluetooth? Discuss Bluetooth Standard.	07
Q.3	(a) (b)	1 0	07 07
Q.3	(a) (b)	What are the Interference Issues in Mobile Communication? Describe it in brief.	07 07
Q.4	(a)	What is small scale fading? Discuss the factors affecting small scale fading.	07
	(b)		07
Q.4 Q.4	(a) (b)	1 1 0	07 07
Q.5	(a)	Describe the factors which influence the choices of Modulation techniques.	07
	(b)	What is MSK? How one achieves GMSK? Explain why GMSK is used in GSM.	07
Q.5	(a)	OR What is spread spectrum modulation technique? Explain Direct sequence spread spectrum	07
	(b)	1 1	07
