Seat No.:	Enrolment No.	
Scat 110	Lindincia ivo.	

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – II • EXAMINATION – SUMMER • 2013

Subj	ect (code: 1722703 Date: 12-06-2	013
Subj	ect 1	Name: Radio Network Planning and Optimization	
Time	: 10	0.30 am – 01.00 pm Total Marks	: 70
Instr	uct	ions:	
	2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	Give brief overview of Wireless Local Area Network (WLAN). What is the need of a radio link budget calculation? Explain uplink radio link budget for a WCDMA system.	07 07
Q.2	(a) (b)		07 07
	(b)	What is the ideal case for the optimization of the radio network plan?	07
Q.3	(a) (b)	1 0 1	07 07
Q.3	(a)	022	07
	(b)		07
Q.4	(a)	Give functions of: (i) Admission Control (ii) Load Control (iii)Resource Management	07
	(b)		07
		OR	
Q.4	(a)	What is the impact of fast power control on cell range? Explain in detail.	07
	(b)	Compare handover control for intra system handover and inter-system handover.	07
Q.5	(a) (b)	Draw and explain the block diagram of the optimization cycle in operational mode.	07 07
Q.5	(a)	•	07
	(b)	(TMN) model? Give functions of each layer. List the actions for the processes that are executed in the network elements in order to accumulate measurement result data and assemble it for collection and/or inspection.	07
