

GUJARAT TECHNOLOGICAL UNIVERSITYM. E. Semester - IInd Examination – June/July- 2011**Subject code: 1722703****Subject Name: Radio Network Planning and Optimization****Date: 27/06/2011****Time: 10:30 am – 01:30 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q.1 (a) How can we enhance capacity and coverage of a wireless network? **07**

(b) How co-planning of WCDMA and GSM networks can be done for RF issues? **07**

Q.2 (a) What is Radio Network optimization ? **07**

(b) Briefly describe next generation mobile communication technology. **07**

OR

(b) Describe WCDMA radio network planning strategy. **07**

Q.3 (a) What is power control ? What is soft handover? **07**

(b) How can we achieve RRU for HSDPA? **07**

OR

Q.3 (a) What are the requirements of radio network optimization? **07**

(b) Discuss various tools used for optimization. **07**

Q.4 (a) What is automatic optimization? **07**

(b) What is radio access network auto tuning? **07**

OR

Q.4 (a) Describe static simulations for WCDMA radio network planning. **07**

(b) How can we achieve congestion control in radio network? **07**

Q.5 (a) What are the effects of radio resource utilization on network performance? **07**

(b) Differentiate between static and dynamic simulations . **07**

OR

Q.5 (a) What is universal frequency reuse? **07**

(b) Draw a flow chart for dimensioning for WCDMA network. **07**
