

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
ME Semester –IV Examination Dec. - 2011

Subject code: 740401

Date: 07/12/2011

Subject Name: Wireless and Mobile Network Architectures

Time: 10.30 am – 01.00 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) What is Cellular concept? How it is utilized to improve the capacity of Mobile Communication System? **07**
(b) Draw and explain GSM Network Architecture. **07**

- Q.2** (a) What do you mean by 3G Mobile services? Describe any two 3G services. **07**
(b) Describe International GSM call set-up procedure. **07**

OR

- (b) Draw and explain different interfaces in GSM system. **07**

- Q.3** (a) Explain Hand-Off strategies in detail **07**
(b) Describe Signaling System no-7 **07**

OR

- Q.3** (a) Explain Channel Assignment strategies in detail. **07**
(b) Write short note on GSM logical channels. **07**

- Q.4** (a) Explain GPRS network architecture in detail. **07**
(b) Explain with the help of block diagram, the operation of the CDPD network architecture. **07**

OR

- Q.4** (a) Explain the operation of Mobile IP. **07**
(b) Explain in detail “WAP network architecture”. **07**

- Q.5** (a) Write short note on “Interference Issues in Mobile Communication”. **07**
(b) Explain GPRS support Nodes. **07**

OR

- Q.5** (a) Describe WLL network configuration. **07**
(b) What is PACS network signaling? Describe different elements of it. **07**
