Name : .....

Roll No. : .....

Invigilator's Signature : .....

CS/M.Tech (ECE)/SEM-2/MEC-203/2010

2010

MOBILE COMMUNICATION — II

Time Allotted : 3 Hours Full Marks : 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for the following : $4 \times 2\frac{1}{2} = 10$

   i) The uplink and downlink Frequency Bands for GSM are respectively

      a) 890-915 MHz and 935-960 MHz

      b) 890-915 GHz and 935-960 GHz

      c) 935-960 MHz and 890-915 MHz

      d) 935-960 GHz and 890-915 GHz.

   ii) Maximum power in GSM Mobile Station belongs to class

      a) 1

      b) 2

      c) 3

      d) 4.

iii) If a satellite is in orbit of a 1350 km away from the earth, it is logically a

a) GEO

b) MEO

c) LEO

d) none of these.

iv) UPTN is proposed to be of

a) 12 digits

b) 13 digits

c) 14 digits

d) 15 digits.

GROUP – B

(Short Answer Type Questions)

Answer any *four* of the following. 4 × 5 = 20

2. Calculate the maximum possible number of channels under GSM standard.

3. Enumerate the reasons for choosing GMSK in GSM.

4. Give an account of SIM card management.

5. Give an account of Mobile IP.

6. How does W-CDMA differ from CDMA ?

GROUP – C

(Long Answer Type Questions)

Answer any *two* of the following. 2 × 20 = 40

7. Give a comparative account of Global star with Iridium.

8. State the objectives of UMTS. Illustrate its development phase and technical aspects in detail.

9. Give a full account of security issues in mobile communication.