

Total No. of Questions : 12]

SEAT No. :

P1439

[4759] -192

[Total No. of Pages : 2

B.E. (I.T.)

MOBILE COMPUTING

(2008 Course) (Semester - I) (Elective - II)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) Answers to the two sections should be written in separate answer books.
- 2) Answer three questions from each section.
- 3) Neat diagrams must be drawn wherever necessary.
- 4) Figures to the right indicate full marks.
- 5) Use of Calculator is allowed.
- 6) Assume Suitable data if necessary.

**SECTION - I**

- Q1) a) Explain detail PCS architecture with neat diagram. [8]
- b) Explain in detail 1G, 2G and 3G technology. [8]

OR

- Q2) a) Describe the three Handoff strategies MCHO, NCHO and MAHO. [8]
- b) Explain in detail the concept of frequency reuse. [8]

- Q3) a) How security is important in Mobile computing? Explain with diagram different security algorithm in GSM. [8]
- b) Explain in detail GSM addresses and identifiers. [8]

OR

- Q4) a) What is role VLR and HLR? Explain in detail roaming example. [8]
- b) Explain in detail GSM MAP service framework. [8]

P.T.O.

- Q5) a)** What are advantages and applications of SMS? Draw and explain SMS architecture. [9]
- b) Explain Mobile originated messaging and Mobile terminated messaging. [9]

OR

- Q6) a)** What is number portability? Describe three types of number portability. [9]
- b) What is hot billing approach? Compare prepaid and postpaid solution. [9]

**SECTION - II**

- Q7) a)** Explain in detail WAP protocol stack. [8]
- b) Explain in detail with neat diagram GPRS architecture. [8]

OR

- Q8) a)** Explain in detail CDMA technology. [8]
- b) Explain features, advantages, applications and limitations of GPRS. [8]

- Q9) a)** Explain various features and header format of IPv6. [8]
- b) What is the importance of home agent and foreign agent in mobile IP? [8]

OR

- Q10) a)** What is the basic purpose of DHCP? How can DHCP be used for mobility and support of mobile IP. [8]
- b) What is MANET? Explain Dynamic source routing in MANET. [8]

- Q11) a)** Explain in detail Spread spectrum technology. [8]
- b) Explain in detail UMTS technology. [10]

OR

- Q12) a)** What is Piconet & Scatternet? Explain in detail Bluetooth technology. [8]
- b) Write a short note on: (any two). [10]
- i) RFID
  - ii) WLL
  - iii) WiMAX

