

Total No. of Questions : 12]

SEAT No. :

P1477

[Total No. of Pages : 2

[4164] - 729

May - June 2012

B.E. (IT)

MOBILE COMPUTING

(2008 Pattern) (Elective - II) (Sem. - I)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:-

- 1) Answers to the two sections should be written in separate books.
- 2) Assume suitable data, if necessary.

**SECTION - I**

- Q1)** a) What is handoff mechanism? Explain the concept of soft handoff and hard handoff. [8]  
b) Explain the architecture of basic cellular system. [8]

OR

- Q2)** a) Explain how a small frequency spectrum is used in cellular system. [8]  
b) What is cell splitting? Explain why it is necessary to split the cell. [8]

- Q3)** Explain GSM architecture, entities in detail along with its security issues. [18]

OR

- Q4)** Write short notes on : [18]

- a) USSD
- b) GSM TDMA frame
- c) VLR overflow problem

- Q5)** a) Explain the SMS architecture along with its features. [8]  
b) What is number portability? Explain its various types. [8]

OR

- Q6)** a) Explain the service node approach and hot billing approach used in mobile prepaid service. [8]  
b) Explain in detail 'International roaming in GSM'. [8]

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## SECTION - II

- Q7)** a) Explain features, advantages and limitations of GPRS. [8]  
b) Explain WAP model in detail. [8]

OR

- Q8)** a) Explain GPRS architecture in detail. [8]  
b) Differentiate 2G and 3G mobile services and hardware features. [8]

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

OR

- Q10)** a) Write a detailed note on MANET. [8]  
b) Explain DSDV and DSR in brief. [8]

**Q11)** Write short notes on : [18]

- a) Bluetooth technical features.  
b) WLL  
c) RFiD

OR

**Q12)** Write short notes on : [18]

- a) WLAN  
b) FHSS and DSSS  
c) UMTS

