

UNIVERSITY OF PUNE

[4364]-799

B. E. (INFORMATION TECHNOLOGY) Examination 2013

MOBILE COMPUTING (414444)

(2008 Course)(ELECTIVE –II) (SEM –I)

[Total No. of Questions:12]

[Total No. of Printed pages :2]

[Time : 3 Hours]

[Max. Marks : 100]

Instructions :

- (1) *Answers any 3 questions from each section*
 - (2) *Answer Q1orQ2,Q3or Q4and Q5or Q6from Section-I and Q7 or Q8,Q9or Q10,and Q11or Q12 from Section-II*
 - (3) *Answers to the two Sections should be written in separate answer-books*
 - (4) *Neat diagram must be drawn wherever necessary.*
 - (5) *Figures to the right indicate full marks.*
 - (6) *Assume suitable data, if necessary.*
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SECTION-I

Q.1a) Explain the need for hand off and step by step Inter-BS Handoff. [8]

b) Explain the concept of frequency route channel. [8]

OR

Q.2a) Describe the three hand off detection strategies. [8]

b) Explain the roaming management in GSM. [8]

Q.3a) Explain step by step description of [8]

1) GSM call origination.

2) GSM call termination.

b) Explain the MAP service primitives in GSM network. [8]

OR

Q.4a) Explain VLR failure restoration. [8]

b) Discuss about the architecture of GSM. [8]

Q.5a) Explain four layers in the SMS protocol. [10]

b) Explain the procedure of International call setup. [8]

OR

Q.6 Write short notes on: [18]

1) Tariff administration

2) SMS architecture

3) Fixed network number portability.

SECTION-II

Q.7a) Describe the GPRS architecture. [8]

b) Discuss the Billing procedure in GPRS. [8]

OR

Q.8a) Describe the WAP protocol. [8]

b) Compare W-CDMA and CDMA 2000. [8]

Q.9a) Describe the goals and requirements of mobile IP. [8]

b) Explain dynamic source routing in MANET. [8]

OR

Q.10a) Explain IPV6 in detail. [8]

b) Explain important processes used in mobile IP. [8]

Q.11 Write short notes on: [18]

1) W-LAN

2)RFID

3)Spread spectrum technologies

OR

Q.12 Write short notes on: [18]

1) Wireless Local Loop

2) Java card

3) Bluetooth