

Total No. of Questions : 10]

SEAT No. :

P3646

[4959]-1136

[Total No. of Pages : 2

B.E.(Information Technology)

MOBILE COMPUTING

(2012 Course) (Elective-III)(Semester-II) (End Sem.)(414463A)

Time :2½Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Answer Q1 or Q2,Q3or Q4, Q5 or Q6 , Q 7 or Q 8, Q 9 or Q10.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right side indicate full marks.*
- 4) *Assume suitable data if necessary.*

Q1) a) Explain the forward and backward handoff mechanism. [4]

b) List and explain strategies of mobile handoff detection. [5]

OR

Q2) a) Explain mobility management concept? Define Handoff and Roaming. [4]

b) What is personal communications systems? Draw and explain basic PCS architecture. [5]

Q3) a) Draw neatly GSM SMS architecture and explain role of SM-SC. [5]

b) What are the HLR and VLR? Describe HLR and VLR in Call Routing Roaming? [5]

OR

Q4) a) Write a short note on: VLR Database Overflow. [4]

b) What are different cases of handovers? Draw the signal and response diagram for all the cases and show their differences clearly. [6]

Q5) a) List and explain benefits of GPRS. What is the role of SGSN and GGSN in GPRS network? [9]

b) Draw and explain WAP architecture. [8]

OR

Q6) a) What are the design guidelines for WAP? What are disadvantages of implementing TCP/IP directly over mobile network? [9]

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- b) Explain how GSM is modified to support GPRS services? Which elements of the network perform the data transfer? Explain. [8]

Q7) a) Specify advantages, disadvantages of application to application messaging architecture. [9]

- b) Draw and explain implementation and design phase of mobile application development. [8]

OR

Q8) a) What is major difference between wireless internet, smart client, and messaging mobile application architectures? [9]

- b) What do we mean smart client? What is the defining factor of smart client applications versus thin client applications? On which devices can we deploy smart client applications? [8]

Q9) a) Write down core and additional features of Android OS. [9]

- b) Describe role of Application framework and Dalvik VM in Android OS architecture. [8]

OR

Q10) a) List and describe application components of android. [9]

- b) Draw flowchart for application life cycle of android. [8]

