

Total No. of Questions : 10]

SEAT No. :

P3189

[Total No. of Pages : 2

[5354]-706

B.E. (Information Technology)

MOBILE COMPUTING

(Elective - III) (2012 Pattern) (Semester - II)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Answer Q1. or Q.2, Q3 or Q4, Q5 or Q6, Q7 or Q8, Q9 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 Soft handoff and Hard handoff mechanism. **[4]**

b) Draw and explain Mobile computing architecture. **[5]**

OR

Q2) a) Explain mobility management in GSM Architecture. **[4]**

b) Explain 1G, 2G, 2.5G and 3G. **[5]**

Q3) a) Explain role of SM-SC with diagram. **[5]**

b) Explain HLR, VLR, AUC and EIR in GSM architecture. **[5]**

OR

Q4) a) Explain in detail VLR Overflow Control. **[5]**

b) Explain with diagram Mobile-Originated Messaging and Mobile Terminated Messaging. **[5]**

Q5) a) How GSM architecture is modified to support GPRS? Explain with diagram. **[9]**

b) Draw and explain WAP architecture. **[8]**

P.T.O.

OR

- Q6)** a) Which are the design guidelines for WAP? Explain the disadvantages of implementing TCP/IP directly over mobile network? [9]
b) Explain SGSN and GGSN in GPRS with diagram. Explain benefits of GPRS. [8]
- Q7)** a) Explain advantages and disadvantages of application to application messaging architecture. [9]
b) Draw and explain analysis, design and Testing 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 is a smart client? What are the requirements to deploy smart client applications? How to differentiate between smart client applications and thin client applications? [8]
- Q9)** a) What are the challenges in Usability Testing of mobile applications. [9]
b) Draw flowchart for application life cycle of android. [8]

OR

- Q10)** a) List and describe application components of android. [9]
b) Explain significance of Dalvik VM and Application framework in Android OS architecture. [8]

