

Total No. of Questions : 10]

SEAT No. :

P2049

[Total No. of Pages : 2

[5059] - 654

B.E. (Computer Engineering) (End Semester)
MOBILE COMPUTING (Elective - III)
(2012 Pattern)

Time :2½ Hours]

[Max. Marks :70

Instructions to the candidates:-

- 1) *Q 1 and Q 2 are compulsory. Solve Q 3 or Q 4, Q 5 or Q 6, and Q 7 or Q 8.Q9 or Q 10.*
- 2) *Figures to the right indicate full makrs.*
- 3) *Assume suitable data if necessary.*
- 4) *Neat diagrams must be brawn wherever necessary.*

SECTION - I

- Q 1)** a) Explain different wireless switching Techniques. [5]
b) Draw and explain Mobile computing architecture for a mobile device.[5]

OR

- Q2)** a) Differentiate between CDMA and TDMA. [5]
b) Explain using block diagram the process of authentication in a GSM Service. [5]

- Q3)** a) What is Hand over? Explain various types of Hand over. [5]
b) Explain the purpose and IEEE standards for WPAN. WLAN, WiMAX, Bluetooth. [5]

OR

- Q4)** a) Explain mobility management with neat diagram. [5]
b) Compare 1G, 2G, 3G, and 4G. [5]

- Q5)** a) What do you mean by tunneling, encapsulation and decapsulation? [6]
b) List the entities of mobile IP and describe data transfer from a mobile node to a fixed node and vice versa. [6]
c) What is Reactive Routing Protocol in MANET? Describe DSR and AODV Routing Protocols. [6]

OR

- Q6)** a) Explain the role of Agent Discovery. Agent advertisement and Agent Solicitation during location Management in GSM Network. [6]
b) Explain working of mobile IP? What are the limitations of traditional IP to support mobility? [6]
c) Explain Snooping TCP. Give the advantages and disadvantages of Snooping TCP. [6]

- Q7)** a) Show architecture of data dissemination and broadcast. Explain the reason for communication asymmetry in mobile network. [8]
b) Explain in detail different data delivery mechanisms. [8]

OR

- Q8)** a) Describe Push-based data-delivery mechanism. What are the advantages and disadvantages of Push-based data-delivery? [8]
b) What are the different types of data synchronizations in mobile computing systems? Describe synchronization usage models in mobile applications. [8]

- Q9)** a) Explain basic characteristics of mobile operating systems and differentiate between iOS and Android OS. [8]
b) What is mobile agent? What are advantages of using a mobile agent. [8]

OR

- Q10)** a) Explain the role of a gateway in connecting networks using different protocols. Describe a Residential Gateway architecture. [8]
b) Write short note on.
i) Architecture of Android application development platform.
ii) Service discovery and device management in mobile O.S. [8]

