

Total No. of Questions : 10]

SEAT No. :

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[Total No. of Pages :2

B.E. (Computer Engineering)

MOBILE COMPUTING

(2012 Course) (Semester - II) (Elective-III) (End Sem.) (410451A)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8, Q9 or Q10.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Assume suitable data, if necessary.

Q1) a) Compare Wired and Wireless Networks based on advantages and disadvantages. **[5]**

b) Explain using block diagram the process of authentication in a GSM Service. **[5]**

OR

Q2) a) Why CSMA/CD is not used in Wireless Networks? **[5]**

b) Explain WPAN and WLAN with one example of each and what is WiMAX? **[5]**

Q3) a) Explain different wireless switching Techniques. **[5]**

b) Explain various mobile operating systems and their features. **[5]**

OR

Q4) a) Differentiate between CDMA and TDMA. **[5]**

b) What is handover? When handover in mobile communication take place? **[5]**

Q5) a) Describe the registration of a visiting mobile node on handover. **[6]**

b) What do you mean by tunneling, encapsulation and de-capsulation? How does a tunnel differ from a route? **[6]**

c) Explain Mobile TCP? Give the advantages and disadvantages of Mobile TCP. **[6]**

OR

P.T.O.

- Q6)** a) What is MANET? Explain DSR protocol in detail. [6]
b) In tunneling, why the “Time to Live” is set to one when IP packet tunnels from the home to the foreign agent? [6]
c) Explain Snooping TCP. Give the advantages and disadvantages of Snooping TCP. [6]

- Q7)** a) Explain what do you mean by data dissemination? [5]
b) What do we mean by selective tuning? Discuss the methods used for selective tuning. [7]
c) Explain the synchronization process. [4]

OR

- Q8)** a) Describe Push-based data-delivery mechanism. What are the advantages and disadvantages of Push-based data-delivery? [8]
b) Explain the reason for communication asymmetry in mobile network. Give examples of asymmetric communication architecture for data dissemination. [8]

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

OR

- Q10)** a) Explain the requirements of a mobile file system over the conventional one, also describe CODA file system. [8]
b) Write Short note on. [8]
i) Mobile-agent-based architecture
ii) Android application development platform.

