

8E5001**8E5001****B.Tech. VIII Semester (Main/Back) Examination - 2013****Computer Science****8CS1 Mobile Computing (Common for 8IT4.1)****Time : 3 Hours****Maximum Marks : 80****Min. Passing Marks : 24****Instructions to Candidates:**

Attempt any **five** questions, selecting **one question** from **each unit**. All questions carry **equal** marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)

Unit - I

1. a) What is mobile computing and challenges against mobile computing? (8)
- b) Explain mechanisms for adaptation and incorporating adaptation. (8)

OR

1. a) Discuss public communication services location management with suitable example? (8)
- b) Explain Energy efficient indexing on air. (8)

Unit - II

2. a) What is data dissemination and explain its model? (8)
- b) Explain Broadcast disk scheduling. (8)

OR

2. a) Explain mobile agent security and fault tolerance using distributed transactions? (8)
- b) Discuss caching management in mobile and cache management schemes. (8)

Unit - III

3. a) Describe unicast discover, multicast discovery and advertisement? (8)
- b) What is services discovery and standardization method? (8)

OR

3. Write short note on:

- i) JINI
- ii) Service catalogs
- iii) Garbage collection
- iv) UPnP (universal plug n play)

(4×4=16)

Unit - IV

4. a) Define the term "pervasive computing". Write down the principles of pervasive computing. (8)
- b) What is smart Identification? Explain its various types. (8)

OR

4. Write short note on the following:

- i) Smart card
- ii) Smart sensor and actuators
- iii) Smart label rtuonline.com
- iv) Smart token

(4×4=16)

Unit - V

5. Describe IrDA-Architecture and protocol stack? (16)

OR

5. Write short note on:

- i) Universal description, discovery and integration (UDDI)
- ii) Simple Object Access Protocol (SOAP)

(8×2=16)