

8E5001

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**B.Tech. (Sem.VIII) (Main/Back) Examination - 2013**  
**Computer Science**  
**8CS1 Mobile Computing(Common for 8IT4.1)**

Time : 3 Hours

[Total 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 discovery, multicast discovery and advertisement? 8  
(b) What is services discovery and standardization method? 8

**OR**

3. Write short notes 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 notes on the following :  
(i) Smart card



- (ii) Smart sensor and actuators
- (iii) Smart label
- (iv) Smart token

**UNIT - V**

**4×4=16**

5. Describe IrDA-Architecture and protocol stack?

**16**

**OR**

5. Write short notes on :

- (i) Universal Description, Discovery and Integration (UDDI)
- (ii) Simple Object Access Protocol (SOAP)

**8×2=16**