

**B.Tech. VIII Semester (Main) Examination, April/May-2017**  
**Computer Science & Engineering**  
**8CS1A Mobile Computing**  
**Common with 8IT4.1**

**Time : 3 Hours**

**Maximum Marks : 80**  
**Min. Passing Marks : 26**

**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 suitable be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.*

**Unit-I**

1. a) What is mobile computing? Write down the applications of mobile computing. (8)
- b) What is adaptation in mobile computing? Explain mechanism of adaptation. (8)

**OR**

1. a) What is mobility management? Explain location management principle and techniques. (10)
- b) Explain energy efficient indexing on air. (6)

**Unit-II**

2. a) What is Data dissemination? What issues facing in data dissemination? (6)
- b) Describe caching management in mobile and cache management schemes. (10)

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**OR**

2. a) What is mobile middleware? How is it being used? What are its benefits? (10)
- b) Explain bandwidth allocation for publishing. (6)

### Unit-III

3. a) What is services discovery and standardization method? Explain in detail. (10)  
b) Briefly explain Eventing. (6)

OR

3. a) Explain middle ware for application development. Also explain middle ware challenges. (8)  
b) Write a short note on : (2×4=8)  
i) Service catalogs  
ii) Garbage collection

### Unit-IV

4. a) What is mobile environment? Explain database system in mobile environment. (8)  
b) What is mobile IP? Explain how mobile IP work in detail. (8)

OR

4. a) Explain the system architecture of world wide web. (6)  
b) What is the difference b/w stateful and state less protocol? (4)  
c) Write a short note on mobile TCP. (6)

### Unit-V

5. a) What is Ad-Hoc Network? What are the main issues of MAC protocol for adhoc network? (6)  
b) What is Routing protocol? Explain DSR in detail. (10)

OR

5. a) What are pro-active and Re-active routing protocols? Explain AdHoc on demand distance vector routing. (12)  
b) What are applications of Ad Hoc Network? (4)

