BT-6/J-22   46172

MOBILE COMPUTING
PE-IT-S312A/PE-CS-S312A

Time : Three Hours]   [Maximum Marks : 75

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit.

Unit I

1. (a) Explain evolution of mobile systems and design considerations for mobile computing.   9

   (b) What is hand-off ? Explain various types and issues therein.   6

2. (a) Explain the concept of HLR and VLR.   6

   (b) Explain the four sub-systems of GPRS system architecture. What are protocol layers between BSS and SGSN in GPRS ?   9

Unit II

3. (a) Explain the working IEEE802.11 MAC.   7

   (b) What are different entities in mobile IP ? Show various types of encapsulation done here.   8

4. (a) What is WAP ? Describe WAP protocol stack and its architecture. **8**

(b) Why cannot we use TCP directly over wireless. Suggest some improvements. **7**

Unit III

5. (a) Explain the need of data replication for mobile computers. **7**

(b) Discuss resource management, scheduling and load balancing in cloud. **8**

6. (a) What are issues in mobile transaction processing ? **7**

(b) Explain the need of map reduce for simplified data processing. **8**

Unit IV

7. (a) What are the concepts in reactive and proactive routing protocols in MANET ? **9**

(b) Explain the working of DSR. **6**

8. (a) What is the reason of AODV protocol being immensely popular ? Discuss. **9**

(b) What are challenges in MANET routing protocols ?

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