BT-6/M-19   36115

MOBILE COMPUTING
CSE-306N

Time : Three Hours]   [Maximum Marks : 75

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

Unit I

1. Answer the following questions in brief :

    (a)   What is Mobile Computing ? What are its major advantages ?

    (b)   What are the design considerations for mobile computing ?

    (c)   What are the ways by which existing applications can be made mobile enabled ?

2. Describe the system architecture of GSM and provide an overview of the various GSM channels. How do HLR and VLR support location management ? Explain channel assignment and handoffs.

Unit II

3. What are the different types of wireless LANs ? Give an overview of 802.11 wireless LAN. How is it different from Bluetooth ?

4. (a) What are the components of Mobile IP ? How does mobile IP work ?

   (b) Explain, why the MAC protocol is more important in wireless LANs than in wired LANs ?

Unit III

5. What are the data management issues in mobile computing ? Explain the issues in brief.

6. Define cloud computing and identify its core features, characteristics and benefits. Briefly summarize the types of clouds.

Unit IV

7. What are the characteristics of Mobile Ad hoc networks ? Give an overview of MAC issues and QoS in ad hoc networks.

8. Give a classification of MANET routing protocols along with a description of any *two* popular MANET routing protocols.