CE1.5-R4:MOBILE COMPUTING

NOTE :

1.	**Answer question 1 and any FOUR from questions 2 to 7.**
2.	**Parts of the same question should be answered together and in the same sequence.**

Time: 3 Hours **Total Marks: 100**

1. (a) Discuss various types of mobile networks.

   (b) Why traditional IP cannot be used for mobile systems?

   (c) How data cache consistency is maintained in mobile environment?

   (d) What is a transcoding Gateway?

   (e) What are the features of Wireless Markup Language (WML)?

   (f) What are the specific applications of GPRS?

   (g) What are the different types of Wireless LANS?

(7x4)

2. (a) Discuss the process of call handover when a mobile station moves.

   (b) Explain the protocol stack of a CDMA system.

(9+9)

3. (a) What is tunneling in mobile IP?Explain the packet header using generic routing encapsulation for tunneling.

   (b) What is I-TCP? Discuss its advantages and disadvantages.

(10+8)

4. Describe the following:

   (a) Voice over IP

   (b) Hiper LAN

   (c) TCP-Reno

(6+6+6)

5. (a) How does CSMA/CA takes care of avoiding the collision in a Mobile Channel Access Process?

   (b) Explain push based data dissemination models. What are the advantages and disadvantages of these?

(10+8)

6. (a) Why data needs to be synchronized in a mobile system? What are the various types of data synchronization?

   (b) What is symmetric key cryptography? Explain DES algorithm.

(9+9)

7. Write short notes on:

   (a) Zigbee

   (b) DSR protocol

   (c) Symbian OS architecture

(6x3)

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