00676

B.TECH. COMPUTER SCIENCE AND ENGINEERING (BTCSVI)

Term-End Examination

June, 2013

BICSE-014 : MOBILE COMPUTING

Time : 3 hours   *Maximum Marks : 70*

Note :   (i)   *Answer* **any seven** *questions.*
          (ii) *All questions carry* **equal** *marks.*

1. (a)   What are the different types of common   5
          channels of GSM ? Explain how they are
          used.

    (b)   Draw and explain the forward channel   5
          structure of CDMA.

2. (a)   With a neat diagram explain the WAP   5
          architecture.

    (b)   Discuss briefly the user scenarios of   5
          Bluetooth.

3. Discuss in detail about the data management   10
    issues involved in mobile environment.

4. (a)   What is the protocol that is used for   5
          advertisement of agent ? How that protocol
          is used ?

(b) Among agent advertisement and agent solicitation, which one is preferred and why ? **5**

5. (a) Explain about the quality of service in ad hoc networks in detail. **5**

   (b) What are the differences between AODV and the standard distance vector algorithm ? Why are extensions needed ? **5**

6. (a) Compare IEEE 802.11, HiperLAN2 and bluetooth with regard to their ad hoc capabilities. Where is the focus of these technologies ? **5**

   (b) Why has a scripting language been added to WML ? How can this language help saving bandwidth ? **5**

7. What is adaptive clustering ? Explain the adaptive clustering for mobile wireless networks in detail. **10**

8. Explain about the following :

   (a) MAC issues **5**

   (b) Temporary Ordered Routing Algorithm (TORA) **5**

9. Explain the role of Home Location Register (HLR) **10**
and Visitor Location Register (VLR) in call
processing in detail.

10. (a) Discuss the various transactions in detail. 5
    (b) What are the problems involved in client 5
    mobility ?

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