USN ☐☐☐☐☐☐☐☐☐☐

06CS/IS831

Eighth Semester B.E. Degree Examination, June/July 2011

Mobile Computing

Time: 3 hrs.

Max. Marks:100

Note: *Answer FIVE full questions selecting*
at least TWO questions from each part.

PART – A

1   a. Describe the various features of smart phones and multimedia phones.   **(10 Marks)**
    b. Explain the various subsystems and units in the GSM architecture. How do these subsystems and units differ from those in GPRS?   **(10 Marks)**

2   a. List out the techniques in OFDM.   **(04 Marks)**
    b. Describe the important features of CDMA systems.   **(06 Marks)**
    c. The clock frequency of LFSR is 1.2288 MHz, the chipping rate is 1.2288 M chip/s. What is the rate of sequences generated at the o/p when spread factor is 64?   **(10 Marks)**

3   a. Differentiate between datagram and packet. What are the uses of datagram in mobile IP protocols?   **(06 Marks)**
    b. Explain the header fields in ICMP messages. What are the uses of ICMP messages in the internet?   **(10 Marks)**
    c. Define : i) Reuse tunneling   ii) Tunneling.   **(04 Marks)**

4   a. What are the functions of home and foreign agents in the mobile IP protocol?   **(08 Marks)**
    b. Describe the features of TCP.   **(04 Marks)**
    c. Explain the data caching architecture.   **(08 Marks)**

PART – B

5   a. Explain the push based data delivery mechanism. List out the advantages of push-based data dissemination.   **(10 Marks)**
    b. Explain the online scheduling algorithm for scheduling the broadcast scheduling.   **(10 Marks)**

6   a. List out and explain popular synchronization protocols for synchronizing mobile applications at the mobile devices.   **(10 Marks)**
    b. List out the characteristics and advantages of mobile agent.   **(10 Marks)**

7   a. Define MANET. How does MANET differ fixed infrastructure network?   **(04 Marks)**
    b. Explain Sun JAVA system, web server 6.   **(10 Marks)**
    c. Explain DSR, AODV protocols.   **(06 Marks)**

8   a. Explain J2EE architecture features.   **(10 Marks)**
    b. What are the features of palmos?   **(06 Marks)**
    c. Explain memory manager features in windows CE.   **(04 Marks)**

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