USN [   ] 10MCA554

Fifth Semester MCA Degree Examination, Dec.2014/Jan.2015
Wireless Networks and Mobile Computing

Time: 3 hrs.   Max. Marks:100

Note: *Answer any FIVE full questions.*

1   a. List the different types of networks used is mobile computing.   (03 Marks)
   b. Explain the three layered structure of WiMAX protocol stack.   (07 Marks)
   c. With a neat diagram, explain the typical data flow in an ICAP environment.   (10 Marks)

2   a. What is PCS? Discuss supportability for PCS frequencies.   (05 Marks)
   b. Discuss various GSM entities.   (05 Marks)
   c. Explain the architecture of SMS.   (10 Marks)

3   a. Explain the two modes of GPRS with suitable example.   (05 Marks)
   b. Write any five applications of GPRS.   (05 Marks)
   c. Discuss the layers of BSS and SGSN interface.   (10 Marks)

4   a. Explain the CDMA Data Protocol Stack layer, with a neat diagram.   (10 Marks)
   b. Discuss various spreading techniques in spread spectrum technology.   (10 Marks)

5   a. Differentiate between the capabilities of mobile phones, PDAs and communicators.   (10 Marks)
   b. What is an mobile IP? Explain the three main phases of mobile IP process.   (10 Marks)

6   a. Explain the smart client architecture, with a neat diagram.   (10 Marks)
   b. What are the technical challenges encountered while developing mobile application?   (10 Marks)

7   a. List the wireless markup languages used to create wireless internet and explain any two of them.   (10 Marks)
   b. Explain the various stages of internet request.   (10 Marks)

8   a. Write short notes on : CDC and J2ME.   (10 Marks)
   b. Explain the MIDlet life cycle, with a neat diagram.   (10 Marks)

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