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13MCA443

Fourth Semester MCA Degree Examination, Dec. 2015/Jan. 2016
Mobile Computing and Wireless Communications

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions.

- 1 a. Explain the three – tier architecture for mobile computing, with a neat diagram. (10 Marks)
b. Explain the context aware systems. (10 Marks)
- 2 a. Discuss in detail, the GSM architecture. (10 Marks)
b. Explain call routing in GSM with an example. (06 Marks)
c. Explain the different types of handovers in GSM. (04 Marks)
- 3 a. Explain the different operations in GPRS networks. (05 Marks)
b. List GPRS specific applications. Describe any 4 of them. (10 Marks)
c. Explain the unique characteristics of SMS. (05 Marks)
- 4 a. Explain the important elements of IS – 95 architecture with a neat diagram. (10 Marks)
b. What are the different spreading techniques? (04 Marks)
c. Explain different handoff – techniques in mobile communication. (06 Marks)
- 5 a. Explain the design constraints in application for handled devices. (10 Marks)
b. Discuss the tunneling operation in mobile IP. (05 Marks)
c. Different between mobile IPv4 and mobile IPv6. (05 Marks)
- 6 a. Describe the smart client architecture with a neat diagram. (10 Marks)
b. Explain the various mobile operating systems. (10 Marks)
- 7 a. Explain the various steps involved in processing a wireless request. (10 Marks)
b. Write a note on :
i) WML
ii) XHTML. (10 Marks)
- 8 a. Explain the security considerations in MIDP. (10 Marks)
b. How do you program for multimedia in J2ME? Explain. (10 Marks)