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13MCA443

Fourth Semester MCA Degree Examination, Dec.2016/Jan.2017
Mobile Computing and Wireless Communications

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions.

- 1 a. With a neat diagram, explain the mobile computing architecture. (12 Marks)
b. Explain the following with respect to content architecture of mobile computing :
 - i) Composite capabilities/ preference profiles
 - ii) Semantic web
 - iii) Security aspects
 - iv) P3P. (08 Marks)
- 2 a. With a neat sketch, explain GSM network architecture. (10 Marks)
b. Explain GSM addresses and identifiers. (10 Marks)
- 3 a. Explain briefly components of GPRS. (06 Marks)
b. Explain GPRS attach procedure with PDP context. (06 Marks)
c. Describe applications and limitations of GPRS. (08 Marks)
- 4 a. With a neat diagram, explain IS-95 CDMA architecture. (08 Marks)
b. List out the difference between GSM and CDMA. (06 Marks)
c. Explain different handoff techniques in CDMA. (06 Marks)
- 5 a. Explain the design constrains for handheld devices. (10 Marks)
b. What is mobile IP? Explain three basic capabilities of mobile IP. (10 Marks)
- 6 a. With a neat diagram, explain the server components of smart client application. (08 Marks)
b. Explain briefly the mobile operating systems. (08 Marks)
c. Explain device emulators. (04 Marks)
- 7 a. Explain the processing of wireless internet request. (08 Marks)
b. What are the key benefits of WAP? (07 Marks)
c. Write a short note on XHTML. (05 Marks)
- 8 a. Describe MIDLET life cycle model. (08 Marks)
b. Explain the security consideration in MIDP. (06 Marks)
c. Briefly explain CLDC. (06 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.