



CBCS SCHEME

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16/17MCA451

Fourth Semester MCA Degree Examination, Dec.2019/Jan.2020 Wireless Communications and Mobile Technologies

Time: 3 hrs.

Max. Marks: 80

Note: Answer FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain about Handheld pocket computers and list the features. (08 Marks)
b. Discuss the limitations of mobile devices. (08 Marks)

OR

- 2 a. Explain Synchronous, Asynchronous data and synchronous packet transmissions. (08 Marks)
b. What is Handover? Explain Handovers in GSM. (08 Marks)

Module-2

- 3 a. Explain ALOHA and CSMA. (08 Marks)
b. Explain Medium Access Control for exposed and hidden terminals. (08 Marks)

OR

- 4 a. Explain Data rate matching and block interleaving in IS-95 CDMA one system. (08 Marks)
b. Explain OFDM with channel carries and applications. (08 Marks)

Module-3

- 5 a. Explain Location management in Mobile IP network layer. (08 Marks)
b. Describe the encapsulation by additional IP header of an IP packet. (08 Marks)

OR

- 6 a. Explain the snooping TCP functions in mobile transport layer. (08 Marks)
b. Describe the ACID rules used in Transactional models. (08 Marks)

Module-4

- 7 a. Explain pull based data delivery mechanism. (08 Marks)
b. Discuss Directory method and Hash-Based method. (08 Marks)

OR

- 8 a. Describe the characteristics of digital Audio broadcasting. (08 Marks)
b. Describe the characteristics of Digital Video broadcasting. (08 Marks)

Module-5

- 9 a. Explain the different types of Synchronization. (08 Marks)
b. Explain Synchronization protocols in mobile computing systems. (08 Marks)

OR

- 10 a. Explain the features of a file system for a mobile computing system. (08 Marks)
b. Write a note on any two of the following : (08 Marks)
i) Service Discovery ii) ZingBee iii) J2ME iv) Palmos.

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.