

Total No. of Questions : 8]

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Roll No

MCADD-805 (1)
M.C.A. (Integrated), VIII Semester
Examination, November 2023

Mobile Computing
(Elective - IV)

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) Discuss the cellular wireless networks. What is the need for specialized MAC?
b) Discuss the various issues in mobile computing. What are the effects of device portability?
2. a) Discuss the soft handoff and hard handoff with differences and similarities.
b) Explain GPRS elements with advantages. Discuss the problems with GPRS.
3. a) Draw and explain the architecture of Ad-hoc network with suitable diagrams
b) Discuss various 802.11 frame formats with appropriate fields in a figure.
4. a) Discuss the dynamic host configuration protocol with its format.
b) Explain the DSDV routing scheme with its applications.

5. a) Explain the indirect TCP model to improve its performance. Also write down the advantages and disadvantages.
b) Explain TCP over wireless network with an example and neat diagram. Also state the TCP congestion control.
6. a) Differentiate between multiplexing and multiple access. Discuss FDMA and TDMA with their advantages and disadvantages.
b) Discuss the frequency allocation methods in cellular networks.
7. a) What are the factors affecting TCP performance? Explain each of them.
b) Explain Bluetooth wireless protocol using short range communication technology. Also discuss the application of Bluetooth technology.
8. a) Discuss the mobile IP. Why is the TCP/IP required for the internet infrastructure? Discuss the reasons and requirements.
b) What are the various types of spread spectrum modulation techniques? Discuss each of them with the diagrams.
