



End Term (Even) Semester Examination May-June 2025

Roll no.....

Name of the Program and semester: B.Tech. CSE (8TH)

Name of the Course: Mobile Computing

Course Code: TOE 811

Time: 3 hour

Maximum Marks: 100

Note:

- (i) All the questions are compulsory.
- (ii) Answer any two sub questions from a, b and c in each main question.
- (iii) Total marks for each question is 20 (twenty).
- (iv) Each sub-question carries 10 marks.

Q1.

- a. Discuss about the mobility. What do you understand about the address migration? (2X10=20 Marks) CO1, CO2
- b. What are the parameters considered for defining QoS in GPRS technology?
- c. Write point wise disadvantages of WLAN. Define cell splitting in mobile computing.

Q2.

- a. Explain HLR and VLR concept for location management in mobile communication. (2X10=20 Marks) CO1, CO2
- b. Discuss about TCP/IP protocol suite with suitable example of protocol defined at each and every layer.
- c. Define transmission impediments and its types in mobile computing? And also explain Doppler Effect in details.

Q3.

- a. Why does power control become one of the main issues for the efficient operation of CDMA? (2X10=20 Marks) CO 2, CO3
- b. Elaborate two basic system architecture of IEEE 802.11 standard? Discuss services offered by this standard.
- c. Compare hybrid channel allocation strategy with the static channel allocation strategies?

Q4.

- a. Identify various issues of data management in mobile computing? Describe data replication for mobile computer. Explain working principles of peer-to-peer reconciliation and Rumor replicated file system. (2X10=20 Marks) CO 3, CO 4
- b. Discuss life cycle of mobile agent based computing with suitable diagram
- c. Discuss design Goals and Architecture of CODA file system. What is side effect in Coda file system.

Q5.

- a. Discuss characteristics of Mobile Adhoc Networks? Why is it not possible to use circuit switching in Adhoc networks? (2X10=20 Marks) CO 5, CO 6
- b. List out the problems in message routing in Adhoc wireless networks? What are advantages and disadvantage of reactive and proactive protocols?
- c. Explain about global state routing protocol with suitable used cases.