Roll No .....

## MCADD-805 (1)

## M.C.A. (Integrated), VIII Semester

Examination, May 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 frequency spectrum for radio transmission with the application of each frequency range.
  - b) Discuss the various types of multiplexing with appropriate diagrams.
- 2. a) What are the objectives of GSM system? Discuss the GSM architecture with suitable network diagram.
  - b) How does call routing in GSM architecture take place? Discuss it with call routing diagram.
- 3. a) Discuss the wireless LAN with its advantages and disadvantages. Also discuss the design goals for a wireless LAN.
  - b) Discuss the IEEE 802.11 protocol architecture with suitable diagram.

- 4. a) Explain the AODV routing scheme with its applications and examples.
  - b) Differentiate ZRP and ODMR routing schemes with their application.
- 5. a) Discuss the mobile TCP for fast retransmit/fast recovery of data with differences of standard TCP and mobile TCP.
  - b) Discuss the WAP model with its architecture and environment. Also differentiate wireless session protocol and wireless transaction protocol.
- 6. a) Discuss the various types of analog modulation techniques and digital modulation techniques with suitable waveform diagrams.
  - b) Discuss the need of Handoff. Also explain types of handover based on source and target cell.
- 7. a) Discuss the basic service set and independent basic service set.
  - b) How are the packets routed through internet using mobile IP? Explain with suitable diagrams.
- 8. a) Discuss the snooping TCP model. How it is used to remove the drawbacks of standard TCP model with suitable diagram.
  - b) Differentiate between CDMA and SDMA with their applications.