## TBC-604(2)

# B. C. A. (SIXTH SEMESTER) MID SEMESTER EXAMINATION, March, 2024

MOBILE COMPUTING

Time: 11/2 Hours

Maximum Marks: 50

- **Note:** (i) Answer all the questions by choosing any *one* of the sub-questions.
  - (ii) Each sub-question carries 10 marks.
- 1. (a) Define Mobile Computing. List the advantages of mobile computing.

  Distinguish between mobile computing and wireless networking. (CO1)

OR

(b) Mention the applications of Mobile Computing. Discuss challenges in Mobile Computing. (CO1)

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2. (a) What is the concept of cellular network?

Discuss why cellular shape is preferred for mobile communication. (CO1)

#### OR

- (b) Describe GSM architecture and its services in detail. (CO1)
- 3. (a) Discuss Wireless MAC. Explain FDMA, TDMA and CDMA in detail. (CO1)

#### OR

- (b) Sketch the protocol stack of Bluetooth standard and also discuss the architecture of the Bluetooth technology. (CO1)
- 4. (a) Write short notes on the following:

(CO2)

- (i) Basic concept of multihopping
- (ii) Adhoc network

### OR

(b) Discuss why the data replication is required for mobile nodes. Discuss various Replication schemes also. (CO2)

- 5. (a) Write short notes on the following: (CO2)
  - (i) Handover
  - (ii) Multicluster architecture

OR

(b) With the help of suitable diagrams, discuss the basic concept of wireless communication and portability. (CO2)