

END TERM EXAMINATION

SIXTH SEMESTER [BCA] JULY 2023

Paper Code: BCA-304

Subject: Mobile Computing

Time: 3 Hours

Maximum Marks: 75

Note: Attempt five questions in all including Q.No. 1 which is compulsory. Select one question from each unit.

- Q1 Attempts all parts of the following: (5x5=25)
- a) What are the main obstacles that occurred in mobile communications?
 - b) Briefly describe DAMA, PRMA, and MACA.
 - c) Explain in detail about GSM services.
 - d) Explain the challenges and pitfalls in the making of WAP.
 - e) Using Current Web Technologies for Wireless Application.

UNIT-I

- Q2 a) Discuss the multipath propagation during wireless transmission. (5)
b) What is modulation? Explain with Amplitude Shift Keying, Frequency Shift Keying and Phase Shift Keying. (7.5)
- Q3 a) What is additional signal propagation effects? (5)
b) Define Direct Sequence Spread Spectrum and Frequency Hopping Spread Spectrum. (7.5)

UNIT-II

- Q4 Explain the following:
- i) What is Pure ALOHA and Slotted ALOHA? (4.5)
 - ii) Difference between Hidden and Exposed. (4)
 - iii) Terminal Near and Far Terminals. (4)
- Q5 a) Briefly describe multi path propagation mechanism in mobile Communication. What are its effects? (5)
b) Explain the term interference in the space, time, frequency and code domain. What are the counter measures in FDMA and CDMA systems? (7.5)

UNIT-III

- Q6 a) What services for the mobile internet? Explain its business opportunities. (6.5)
b) Explain the following : (i) <anchor> (ii) <option> (iii) <head>. (6)
- Q7 a) Explain the WBMP Image Format with suitable example. (6.5)
b) What is the difference between Template and Card? (6)

UNIT-IV

- Q8 How many types of operators used in WML Script? Explain all with suitable example. (12.5)
- Q9 a) Discuss the elementary knowledge of libraries using String, WML Browser & Dialogs. (6.5)
b) What is WML script program? Explain access pragma vs meta pragma. (6)
