

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech. (CE / CSE / AI&ML / EE / ECE / EEE / IT/ DS / Internet of Things
and Cyber Security including Block Chain Technology / BCA) (Sem-6)**

WIRELESS COMMUNICATION

Subject Code : BTEC-601-18

M.Code : 79373

Date of Examination : 11-05-2024

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Answer briefly :

- a. Define cellular system.
- b. What is a cluster?
- c. What is the need for diversity?
- d. What is channel modeling?
- e. What is Pure ALOHA?
- f. Define SDMA.
- g. List GSM services.
- h. What is IMSI and TMSI?
- i. Define reduction factor.
- j. List disadvantages of cell splitting.

SECTION-B

2. What is FDMA? Explain different features of FDMA.
3. What is fading? Differentiate :
 - a. Fast and slow fading
 - b. Flat and selective fading.
4. What is the principle of frequency reuse in the context of cellular networks? List the ways of increasing the capacity of a cellular system.
5. In GSM network, explain the role of Network and Switching subsystems.
6. Explain wireless cable television in detail.

SECTION-C

7. Describe Spread spectrum technologies.
8. Explain different types of GSM Channels.
9. Explain diversity techniques in detail.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.