

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (ECE) (PIT) (Sem.-6)
WIRELESS COMMUNICATION

Subject Code : UC-BTEC-601-18

M.Code : 80050

Date of Examination : 02-07-22

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. Write briefly :

- a) What do you mean by sectoring?
- b) Discuss the role of BSC and MTSO.
- c) Explain briefly the concept of packet ratio.
- d) Derive relation between reuse distance and radius of cell.
- e) Discuss the different types of handoffs.
- f) How the coverage area is improved?
- g) What is paging system?
- h) Compare flat fading and frequency selective fading.
- i) Discuss Co-channel interference.
- j) What are the various design parameters of a wireless communication?

SECTION-B

2. Draw and explain the basic block diagram showing various components and operation of cellular systems.

3. Discuss concept of Bluetooth technology and its applications.
4. What are the various diversities used to improve the quality of wireless transmission.
5. Explain reverse CDMA channel modulation process with the help of a neat block diagram.
6. Explain the working of GSM system.

SECTION-C

7. Explain and compare the features of various Generations of Cellular networks.
8. How the users are increased by using various multiple access techniques and their hybridisation in wireless communication with suitable examples and compare their performances.
9. Explain the followings:
 - a) Coherence bandwidth
 - b) Space Division Multiplexing
 - c) Doppler spread

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.