

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(CSE / IT) (Sem.-7,8)

WIRELESS COMMUNICATION

Subject Code : BTEC-601-18

M.Code : 90610

Date of Examination : 18-01-2023

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 are different key elements for planning cellular system?
- b) What is co-channel interference?
- c) Define slow fading.
- d) What is handoff?
- e) Differentiate between Selective and Switched combining.
- f) What is TDMA?
- g) Define slotted ALOHA.
- h) Define forward CDMA channel.
- i) List various features of GSM.
- j) What is Zigbee?

SECTION-B

2. Explain the concept of frequency reuse channels.
3. Explain the concept of diversity branches and signal paths.
4. Differentiate between the TDMA and SDMA.
5. Explain the frame structure for GSM .
6. What are the different 4G key challenges and their proposed solutions?

SECTION-C

7. **Write note on:**
 - a) Wireless Cable television
 - b) LTE-Advance Systems
8. Explain UMTS in detail.
9.
 - a) Discuss multiple access protocol ALOHA in detail, highlighting its throughput performance against offered load.
 - b) What is CDMA digital cellular standard (IS-95)?

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.