

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech.(Computer Science & Engineering/Electrical
Engineering/Electronics & Communication Engineering/Information
Technology/Mechanical Engineering) (Sem.-8)**

WIRELESS COMMUNICATION

Subject Code : BTEC-601-18

M.Code : 90610

Date of Examination : 14-07-22

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) Differentiate between analog and digital systems.
- b) What is co-channel interference?
- c) Define fast fading.
- d) Name the different combining methods.
- e) What is FDMA?
- f) Define Pure ALOHA.
- g) Define reverse CDMA channel.
- h) List the various services of GSM.
- i) What is Bluetooth?
- j) What is LTE?

SECTION-B

2. Explain cell splitting in detail.
3. What is the concept of diversity branches?
4. Differentiate between maximal ratio combining and equal gain combining with respect to space diversity consideration.
5. Explain the frame structure in GSM along with the different burst format.
6. Write a short note on shortcomings of 4G mobile technique.

SECTION-C

7. Write note on :
 - a) Concept of frequency reuse channel.
 - b) Component and operation of cellular systems .
8. Explain 5G mobile techniques in detail.
9. Differentiate between TDMA / FD MA/ CDMA 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.