

S. B. Roll. No.....

WIRELESS AND MOBILE COMMUNICATION
6th Exam/ECE/5619/Dec'22
(For 2018 Batch Onwards)

Duration: 3Hrs.

M.Marks:75

SECTION-A

Q1. Give answer in one line.

15x1=15

- a. Define cluster.
- b. What is cell sectoring?
- c. Which shape is preferred while choosing cell shape in cellular system?
- d. Expand LTE.
- e. What is CCI?
- f. Write full form of GSM.
- g. What is frequency reuse?
- h. What are co channel cells?
- i. Write full form of CDMA.
- j. Define fading.
- k. What are electromagnetic waves?
- l. Write any two features of UMTS.
- m. How much speed does GPRS offers?
- n. What do you mean by handoff?
- o. Who is responsible for managing the radio network in GSM architecture and is controlled by an MSC?

SECTION-B

Q2. Attempt any six questions.

6x5=30

- i. Why we use hexagonal geometry in cellular system?
- ii. List out the various methods to increase the cellular capacity.
- iii. Write advantages of wireless communication.
- iv. Explain Doppler Effect.
- v. Write a short note on GPRS.
- vi. Write short note on FDMA.
- vii. How is power control for reducing interference?
- viii. Briefly explain HSPA.
- ix. What are various spread spectrum techniques?

SECTION-C

Q3. Attempt any three questions.

3x10=30

- a. Explain the architecture and features of LTE.
- b. Explain the various propagation considerations for wireless communication.
- c. Compare CDMA and GSM system.
- d. Draw and explain GSM architecture.
- e. Write short note on any two of the following.
 - i. Adjacent Channel Interference.
 - ii. EDGE.
 - iii. Fading.