

No. of Printed Pages : 4
Roll No.

221053

**5th Sem / ECE, ECE(For Speech and
Hearing Impaired)**

Subject:- Wireless & Mobile Communication

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 Which of these is a characteristics of cellular networks?
- a) Uses landlines only
 - b) High mobility
 - c) Requires large antennas
 - d) Low frequency spectrum usage
- Q.2 What is the full form of GPRS?
- a) General Packet Radio Service
 - b) Global Positioning Radio System
 - c) General Public Radio System
 - d) Global Packet Radio Satellite

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- Q.3 Which technology uses time slots to share frequency among users?
- a) CDMA
 - b) TDMA
 - c) FDMA
 - d) OFDMA
- Q.4 What is handover in mobile communication?
- a) Connecting to the nearest tower
 - b) Switching channels
 - c) Changing frequency
 - d) Transferring an active call from one cell to another
- Q.5 In cellular communication, what is a 'cell'?
- a) A type of mobile phone
 - b) A geographical area covered by a network
 - c) The main base station
 - d) A network protocol
- Q.6 Which of the following is a feature of 3G networks?
- a) Provides text messaging only
 - b) Enables internet browsing and video calls
 - c) Only works in urban areas
 - d) Has limited data speed

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SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

- Q.7 Define cell area in the context of cellular networks.
- Q.8 Mention one primary use of Wi-Fi in mobile communication.
- Q.9 What is the function of EDGE in mobile networks?
- Q.10 Write the full form of CDMA.
- Q.11 Name one advantage of 4G over 3G technology.
- Q.12 What is fading in wireless communication?

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

- Q.13 Explain the difference between a base station and a mobile station in cellular networks.
- Q.14 Describe any two advantages of wireless communication over wired communication.
- Q.15 What are the main features of 5G technology.?
- Q.16 Briefly explain how Frequency Division Multiple Access (FDMA) works.
- Q.17 Discuss the role of power control in reducing interference in cellular systems.

- Q.18 Explain the concept of adjacent channel interference.

- Q.19 Describe the architecture of GPRS.

- Q.20 What is cell sectoring and how does it improve network performance?

- Q.21 Outline the key features of Bluetooth technology in wireless communication.

- Q.22 What is OFDMA and where is it used?

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23 Compare the main differences between 2G, 3G, and 4G technologies in terms of speed and functionality.

- Q.24 Describe the architecture and functions of Global System for Mobile Communication (GSM).

- Q.25 Explain Frequency Division Multiple Access (FDMA) technology and discuss its applications and benefits.