

No. of Printed Pages : 4  
Roll No. ....

221053

**5 Sem. Branch : ECE, ECE  
(For Speech & 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 The first 2G system is known as :  
a) GSM                                      b) CDMA  
c) TDMA                                      d) FDMA
- Q.2 Larger cells are more useful in :  
a) Densely populated urban areas  
b) Rural areas  
c) Lightly populated urban areas  
d) Mountain areas
- Q.3 Which of the following is not a limitation of AMPS:  
a) Low calling capacity    b) Poor privacy protection  
c) Limited spectrum        d) Wide coverage area
- Q.4 In CDMA, all earth stations can transmit:  
a) On the same frequency

(1)

221053

- b) At the same time  
c) Both A & B  
d) None of these

- Q.5 Limitation of cordless telephone are :  
a) Background noise    b) Side tone  
c) Frequency response    d) All of the above
- Q.6 MSC in GSM architecture stands for :  
a) Mobile station centre  
b) Mobile switching centre  
c) Mobile station controller  
d) None of these

**Section-B**

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

- Q.7 Define frequency spectrum.
- Q.8 TDMA stands for \_\_\_\_\_.
- Q.9 What is the purpose of sectoring in cellular networks?
- Q.10 Write the full form of EDGE in mobile communication.
- Q.11 Name any two types of interference in wireless communication.

(2)

221053

Q.12 Define propagation in the context of wireless communication.

### Section-C

**Note: Short answer type Question. Attempt any eight questions out of Ten Questions. (8x4=32)**

Q.13 Explain the basic concept of frequency reuse in cellular communication.

Q.14 Describe the structure of a cell site.

Q.15 What are the key differences between FDMA and TDMA?

Q.16 Explain the purpose and working of Global System for Mobile Communication (GSM).

Q.17 What is co-channel interference? How is it controlled?

Q.18 Describe the concept of time-division multiple access (TDMA).

Q.19 Write a short note on the advantages and limitations of wireless communication.

Q.20 Explain the role of Bluetooth and Wi-Fi in wireless communication.

Q.21 What are the main features of 4G technology?

Q.22 Discuss the concept of cell splitting and its importance.

### Section-D

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

Q.23 Compare and contrast 3G, 4G and 5G technologies in terms of speed, architecture & applications.

Q.24 Explain the architecture and working of LTE (Long Term Evolution)

Q.25 Describe Code Division Multiple Access (CDMA). Discuss advantages and applications of CDMA.