

S.B. Roll No.....

WIRELESS AND MOBILE COMMUNICATION
6TH Exam/ECE/ETV/ ECEII/0761/8164/5761/Nov'16

Duration: 3 hrs

M. Marks: 75

SECTION – A

Q.1 Fill in the blanks:

1x15=15

- a. ITU stands for _____.
- b. _____ are caused by mobility of terminals.
- c. _____ Frequencies can penetrate buildings and heavy foliage quite easily.
- d. _____ was first 2G system.
- e. The average radii of all the cells in the network _____ with cell splitting.
- f. SIM stands for _____.
- g. RFID stands for _____.
- h. In Pico cells, the cell size varies from _____.
- i. Paging system is a _____ way of communication system.
- j. GSM is a _____ cellular network.
- k. The area covered by one network operator is called _____.
- l. _____ has a very high spectral efficiency.
- m. _____ users share a common frequency channel, on the same frequency at the same time.
- n. Signals which are _____ in frequency to the desired signal cause adjacent channel interference.
- o. Cell _____ consists of decreasing the radii of existing cells and adding new ones.

SECTION – B

Q.2. Attempt any six Questions.

5x6=30

- a. Write down advantages of wireless communication?
- b. What is interference? Explain its types?
- c. Explain cellular phone system in detail.
- d. Write a short note on the concept of handoff.
- e. What do you mean by cellular repeater? Explain its need.
- f. What are different types of schemes of spread spectrum?
- g. Explain Bluetooth system operation.
- h. Give applications of GPS.

SECTION - C

Note: Attempt any three questions.

10x3=30

- Q3. What are the factors that affect the propagations of the signal? Explain in detail.
- Q4. Write short notes on (any two)
 - a) Frequency response
 - b) Cell sectoring
 - c) Cell splitting
- Q5. Compare FDMA, TDMA and CDMA.
- Q6. Explain the GSM operation in detail.