

No. of Printed Pages : 4

Roll No.

121063/031063

6th Sem. / ECE

Subject : Wireless & Mobile Communication

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

- Q.1
- a) Paging system is a one-way personal wireless messaging system. (True/False)
 - b) What is difference between wired communication and wireless communication?
 - c) What is the need of wireless communication?
 - d) What is the relation between frequency and wavelength?
 - e) PSTN stands for_____.
 - f) Cordless telephone system has limited range. (True/False)
 - g) Define Cell.

(1)

121063/031063

- h) What is the main difference between 3G and 4G cellular telephone system?
- i) Advance mobile phone system (AMPS) is example of _____ generation cellular telephone system.
- j) What is cell cluster?
- k) Define range.
- l) CDMA stands for_____.
- m) What is the need of multiple access technique in wireless communication?
- n) GPS stands for_____.
- o) What is the use of Wi-Fi?
- p) What is the function of base station controller (BSC)?
- q) What is full form of SIM?
- r) What is full of GSM?

SECTION-B

Note: Short answer type questions. Attempt any ten parts 10x4=40

- Q.2
- i) What are the advantages and disadvantages of wireless communication?

(2)

121063/031063

- ii) Explain the frequency spectrum used for wireless communication.
- iii) Explain the working of paging system.
- iv) What are disadvantages of cordless telephone system?
- v) Explain how a call is initiated in cellular telephone system.
- vi) Write a short note on "3G cellular systems".
- vii) What are the limitations of First generation (1G) cellular systems?
- viii) Write a short note on "Cellular concept".
- ix) What is cell splitting? What is the need of cell splitting?
- x) How interference can be reduced by controlling power?
- xi) What is spread spectrum multiple access (SSMA)?
- xii) Write comparison between FDMA and CDMA.
- xiii) Write a short note on "GPRS".
- xiv) What is Bluetooth? Write its application.
- xv) Explain the process of Hand-off.

(3)

121063/031063

SECTION-C

Note: Long answer type questions. Attempt any three questions. 3x10=30

- Q.3 Explain in detail, comparison of paging system, cordless system and cellular system.
- Q.4 With the help of suitable diagram, explain co-channel and adjacent channel interference.
- Q.5 What is Time Division Multiple Access? Explain with the help of suitable diagram.
- Q.6 What is GSM? Explain the architecture of GSM with the help of suitable diagram.
- Q.7 Draw and explain basic block diagram of digital and data communication system.

(1320)

(4)

121063/031063