SIXTH SEMESTER DIPLOMA IN COMPUTER ENGINEERING

Mobile Communication

(Maximum Marks :100)

PART –A

(Answer all questions)

I.

1. Give the example for first generation cellular network .

2. List three satellite orbits based on altitude.

3. Expand FDMA,CDMA

4. List the services provided by IEEE 802 .16

5. Define scatternet.   (5 x 2 =10)

PART –B

(Answer any five questions. Each question carries 6 marks)

II.

1. Briefly explain first generation cellular system TDMA.
2. Write short notes on TDMA multiple access technique.
3. Describe about satellite orbits.
4. Explain codeless system.
5.   Describe the MAC layer of IEEE 802..11
6. Explain spread spectrum LAN
7.   Describe about wireless sensor network.   (5 x 6 =30)

PART –C

UNIT I

III.

1.   Discuss Frequency reuse, Increasing capacity related with cellular network systems.   10

2. Describe the operation handoff and its types. .   5

OR

IV.

    1. Discuss third generation cellular system   7

    2. Differentiate between FDMA and TDMA .   8

UNIT II

V.

    1. List the mobile IP terminology.   8

    2. Explain IEEE 802.16 Broadband wireless access standards   7

OR

VI.

    1. Explain the architectural overview of Wireless Application Protocol   9

    2. Explain capacity allocation time division.   6

UNIT III

VII.

    1. Explain 802.11 architecture with a diagram   .   10

  2. Briefly describe Narrowband Microwave LAN   5   .

OR

VIII.

    1. Differentiate between 802.11 Medium Access Control and Physical Layer   9
    2. Write short notes on Wireless LAN   6

UNIT IV.

IX.   1. Discuss the protocol stack of Bluetooth with a diagram.   10

    2. Explain WPAN   5

OR

X.   1.   Explain Bluetooth application and services   10

    2.   Describe Bluetooth low energy.   5