UNIT - V

9. a) Explain VSAT architecture with proper diagram.

   6

   b) How is position fixing done by GPS? Explain. 6

   c) What is FDMA? List its features. 2

10. a) Explain the changeover types from one satellite to other with proper diagram. 7

    b) Compare and contrast GEO, MEO & LEO systems.

    7

PG / INTEGRATED ODD SEMESTER (CBCS) EXAM., 2020

held in April – 2021

COMPUTER SCIENCE

7th / 1st Semester

COURSE NO. MCS - 702 / MS - 102
(Wireless & Mobile Computing)

Full Marks : 70
Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

(Answer any five)

UNIT - I

1. a) IEEE 802.11 supports which topology? How does it connects/setup the network? Give two examples.
   1+3+1=5

   b) In infrastructure network what is the maximum distance that can be correct? Explain how. 1+2=3

   c) What is "single failure point" network? Explain.

   3

   d) List some technical features of 2G Cellular networks.

   2

2. a) What was the "need" for cellular networks? Write a technical note. 5

   b) What is the radio frequency used in cordless telephone? Which access system is used in this technology? 1+1=2

   c) Name a system that supports multinop adhoc network. 1

   d) Explain how routing complexity and controllability effect the working & efficiency of a network. 3+3=6

UNIT - II

3. a) Compare the technical features of WIFI and Bluetooth. 7

   b) What are the features of RF and IR wireless LAN. Compare and Contrast. 7

4. a) How does 3G & 4G wireless n/w's differ from each other? 7

   b) What are the topologies that can be deployed for wireless LAN? What are the advantages & applications of wireless LAN? 4+3=7

UNIT - III

5. Why is mobility management important? Explain the role of mobility management with respect to GSM architecture. 3+11=14

6. a) What functions do the following perform: 3+1=4

   i) MSC

   ii) GMSC

   b) Explain with diagram the similarities & differences between Mobile Terminated Call & Mobile Originated Call. 9

   c) What is ISDN? 1

UNIT - IV

7. a) Classify Mobile Data Networks. How do they differ from each other? 9

   b) What is Fading? Explain Co-Channel Interference Reduction Factor. 2+3=5

8. a) Compare and contrast between CDPD and GSM architectures. Draw the diagram of CDPD for the same. 10

   b) What are the advantages of intelligent cells? 4