

SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act,1956)

Course & Branch :B.Tech - IT

Title of the Paper :Telecommunication Systems Max. Marks :80

Sub. Code :412505/512505/612503

Time : 3 Hours

Date :28/04/2010

Session :AN

PART - A

(10 x 2 = 20)

Answer ALL the Questions

1. Define beam width of an antenna.
2. What is fading?
3. Define dispersion.
4. Give any three advantages of fiber optic communication system.
5. What are the different types of multiple access methods?
6. What is ISDN?
7. Define IMTS.
8. What are the digital cellular systems?
9. What is Citizen's Band Radio?
10. What is Meant by frequency reuse in mobile communication?

PART – B
Answer All the Questions

(5 x 12 = 60)

11. Explain Yagi-Uda array antenna and their characteristics? Also derive antenna gain, effective area, Radiation pattern and beam width.
(or)
12. Explain Ionospheric wave propagation.
13. Explain the fiber structures and their functions. Also Explain about different types of fibers.
(or)
14. Discuss on Optical Receivers.
15. Explain the applications of Satellite communication in navigation and Internet Service.
(or)
16. Explain TDMA, CDMA, FDMA
17. Briefly explain cellular telephone system.
(or)
18. Explain ISDN with neat diagrams.
19. Explain advanced mobile phone service and AMPS control system.
(or)
20. Explain FAX, data communication using cellular phones.