

SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act,1956)

Course & Branch: B. Tech - IT

Title of the paper: Telecommunication Systems

Semester: V

Sub.Code: 12505 (2002/2003/2004)

Date: 23-11-2006

Max. Marks: 80

Time: 3 Hours

Session: FN

PART – A

(10 x 2 = 20)

Answer ALL the Questions

1. Define Radiation Resistance.
2. What is meant by selective fading?
3. State the advantages of fiber optics in communications.
4. Write the types of fibers.
5. State the advantages of geostationary orbit.
6. Draw the frame format of TDMA.
7. Explain the operation of paging system.
8. Define : Frequency reuse technique.
9. Which cellular system do not use a constant envelope modulation scheme?
10. What is meant by Handoff?

PART – B

(5 x 12 = 60)

Answer ALL the Questions

11. With the help of diagram, explain the working of practical broad band antenna used for HF and UHF reception.
(or)
12. Write in detail about the role of troposphere and ionosphere in microwave communication.

13. Explain the various types of photodiodes used for detecting light optical fibers?
(or)
14. With the help of block diagram explain fiber optic communication link.
15. Compare FDMA and TDM techniques of multiplexing.
(or)
16. Explain with block diagram of earth station.
17. Explain in detail about the operation of facsimile.
(or)
18. Explain the operation of CB exchange with neat diagram
19. Explain the DECT MAC frame format in detail.
(or)
20. Explain the system architecture of Digital Cellular System.