

# SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act, 1956)

Course & Branch: B.E - IT

Title of the paper: Data Communication and Computer Networks

Semester: V

Max. Marks: 80

Sub.Code: 414606

Time: 3 Hours

Date: 26-04-2007

Session: FN

---

## PART – A

(10 x 2 = 20)

Answer ALL the Questions

1. What is pulse code modulation?
2. Define the three transmission modes?
3. How does a single bit error differ from a burst error?
4. What is BSC protocol?
5. Differentiate space division switching and time division switching.
6. List the functions of FDDI.
7. What are the applications of ATM?
8. What are the X.25 layers?
9. What are the advantages of using UDP over TCP?
10. List the functions of Gateways.

## PART – B

(5 x 12 = 60)

Answer All the Questions

11. Explain the functions of the various layers of OSI model.  
(or)
12. Explain the polar encoding technique of digital to digital conversion.
13. Discuss about the synchronous and asynchronous protocols in detail.

(or)

14. Compare the Vertical Redundancy and Longitudinal Redundancy Check in detail with examples.

15. Write notes on Ethernet.

(or)

16. Explain clearly the packet switching method as a solution for data transmission.

17. With a neat flowchart and required diagrams explain the leaky bucket algorithm.

(or)

18. Explain the architecture of ATM.

19. Discuss about the Simple Mail transfer Protocol in detail.

(or)

20. Explain in detail the features of Link state routing.