## SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act,1956)

Course & Branch: B. Tech - IT

Title of the paper: Database Management System

Semester: V Max. Marks: 80 Sub.Code: 112506 Time: 3 Hours Date: 20-11-2006 Session: FN

## PART – A Answer ALL the Questions

 $(10 \times 2 = 20)$ 

- 1. Distinguish between data base manager and data base administrator.
- 2. What is a weak entity?
- 3. What are quantifiers? Give example.
- 4. Define functional dependency.
- 5. What are the two recovery techniques used for transaction failures?
- 6. List the types of fragmentation techniques used in distributed data base systems?
- 7. What is an occurrence tree?
- 8. What is a spatial data base?
- 9. What is a data warehouse?
- 10. What are the two components of an object?

## PART – B $(5 \times 12 = 60)$ Answer ALL the Questions

11. What are the components of database system? Explain in detail with a neat diagram

(or)

- 12. Construct an ER diagram for university office. The office maintains data about each class, instructor, enrollment and time and place of class meeting. For each student-class pair a grade is recorded.
- 13. Explain in detail about the SQL commands.

(or)

- 14. What is domain-relational calculus? Also give the features of QBE with example.
- 15. Explain the two phase locking protocol with example.

(or)

- 16. Explain the fragmentation techniques used in distributed database.
- 17. What is a set in network datamodel? Explain the DML commands used in network datamodel.

(or)

- 18. Describe the features of Active and deductive databases.
- 19. Explain classification and prediction in detail.

(or)

20. Explain the design of object oriented database.