## 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: 27-04-2007 Session: AN

PART - A

 $(10 \times 2 = 20)$ 

Answer ALL the Questions

- 1. Define DBMS.
- 2. What are the various types of attributes?
- 3. What is Outer Join and its types?
- 4. What is cursors in PL/SQL?
- 5. Define functional dependency.
- 6. Explain BCNF with example.
- 7. What is a system catalog?
- 8. What is a centralized DBMS?
- 9. What is temporal database?
- 10. What is a distributed computing system?

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

11. Explain the advantage of DBMS.

(or)

- 12. Construct an ER diagram for hospital with a set of patients and a set of doctors. A log of the various conducted test is associated with each patient. Also construct appropriate tables for each of the above ER diagram.
- 13. Explain with a suitable example that QBE is query language suitable for tree-structured relations.

- 14. Explain the features and functionality of MS-Access.
- 15. Discuss the different types of transaction failures. What is meant by catastrophic failure?

(or)

- 16. Describe the shadow paging recovery technique. Under what circumstances does it not require a log?
- 17. Discuss how time is represented in temporal databases and compare the different time dimensions.

(or)

- 18. How do spatial databases differ from regular databases?
- 19. What are the main features of data mining tools? (or)
- 20. Describe the steps of building a warehouse.