SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY
DEEMED UNIVERSITY

Course: B.E./B.Tech.   Semester: V
Title of the paper: Database Management Systems   Max. Mark: 80
Sub. Code: 11506 /12506 (2002 / 2003)   Time: 3 Hours

PART – A   (10 x 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   (5 x 12 = 60)
Answer ALL the Questions

11. Explain the advantages 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.

(or)

14. Explain the features & functionality of Ms-Access.

15. Discuss the problem of spurious tuples and how we may prevent it.

(or)

16. Define first, second and third normal forms when only primary keys are considered.

17. Discuss the different types of transaction failures. What is meant by catastrophic failure?

(or)

18. Describe the shadow paging recovery technique. Under what circumstances does it not require a log?

19. Discuss how time is represented in temporal databases and compare the different time dimensions.

(or)

20. How do spatial databases differ from regular databases?