SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act, 1956)

Course & Branch: B.E/B.Tech – CSE/IT (Dual CSE)
Title of the paper: Database Management System

Semester: V Max.Marks: 80

Sub.Code: 411506-412506-511506-512506-6C0100

Date: 02-05-2009 Session: AN

PART – A Answer All the Questions $(10 \times 2 = 20)$

Time: 3 Hours

1. Define: DBA

- 2. Draw an ER diagram with multivalued attributes.
- 3. What is nonprocedural language? Give example.
- 4. Write the role of normalization in the database design.
- 5. Describe the usage of rollback.
- 6. Write the different techniques that are used during the process of distributed database design.
- 7. What is meant by skew?
- 8. Write short notes on network model.
- 9. What is super class? Give one example.
- 10. Write the association rules in data mining.

PART - B (5 x 12 = 60) Answer All the Questions

11. List out various secondary storage devices and explain any two.

(or)

- 12. (a) Write short notes on data independence and its type.
 - (b) Draw a neat sketch and explain the three-schema architecture.
- 13. How do functional dependencies play a key role in differentiating good database design from bad database designs? Explain.

(or)

- 14. Explain the fundamental operations in relational algebra with example.
- 15. List out various locks in concurrency control. Explain each type with example.

(or)

- 16. Discuss the various issues of database security in detail.
- 17. Explain some common relational operations in intraoperation parallelism.

(or)

- 18. Explain multimedia database.
- 19. Discuss the various type constructors. How are they used to create complex object structures?

(or)

- 20. Write short notes on
 - (a) Data mining
 - (b) Data warehousing