SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act, 1956)

Course & Branch: B.E/B.Tech - CSE/DCS/IT/P-IT Title of the Paper: Database Management Systems

Sub. Code: 411506-412506-511506-512506-6C0100-6CPT0012

Time: 3 Hours Max. Marks: 80

Date :20/11/2009 Session :FN

PART - A

 $(10 \times 2 = 20)$

Answer ALL the Questions

- 1. Give an example for relationship instance.
- 2. What is meant by assertion?
- 3. What is the use of NULL values in databases?
- 4. Define: Trigger.
- 5. Give an example for transaction.
- 6. What is the use of log records?
- 7. Differentiate between consistency and coherence.
- 8. What is data dictionary used for?
- 9. Give two drawbacks of network model for DBMS.
- 10. What is OLAP?

PART – B

 $(5 \times 12 = 60)$

Answer ALL the Questions

11. Explain the concept of aggregation and generalization in data modeling with examples.

(or)

- 12. (a) Construct an E R diagram for a car Insurance company whose customers own one (or) more cars.
 - (b) Compare ordered indices and hash indices.

- 13. (a) State Armstong's axioms of functional dependency.
 - (b) Compare BCNF and 3NF.

(or)

14. Consider the following relational schema:

Employee (empno, name, office, age)

Books (isbn, title, authors, publisher)

Loan (empno, isbn, date)

Write SQL queries for the following:

- (a) List the employees who have borrowed any book published by "McGraw Hill"
- (b) List the employees who have borrowed only the books published by McGrawHill.
- (c) List the employees who have borrowed books on "C Programming" by any author.
- 15. Discuss about privileges and authorization provided by SQL. (or)
- 16. What is two phase lock protocol? How is it implemented?
- 17. Explain Intraquery and Interquery parallelism and their related issues.

(or)

- 18. Give a brief overview of temporal and multimedia databases.
- 19. Explain the architecture of data warehousing and discuss some real applications.

(or)

20. Explain overloading and inheritance of tables with examples.