

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: 11506/12506(2002/2004/2005)/312506

Time: 3 Hours

Date: 27-11-2007

Session: FN

PART – A

(10 x 2 = 20)

Answer All the Questions

1. What is a database?
2. What are the major components of Entity-Relationship Model?
3. Define functional dependency.
4. What are the two approaches for relational database design?
5. What is DDL?
6. What is meant by granting a privilege?
7. What is a temporal database?
8. Mention 2 applications of commercial deductive database systems.
9. Define data ware house.
10. What are the applications of data mining in data warehouse.

PART – B

(5 x 12 = 60)

Answer All the Questions

11. a. Construct an E-R diagram for a college with a set of faculty, set of students and set of course. (10)
b. Write the difference between a weak and strong entity set. (2)
- (or)
12. Explain the database system structure and architecture.
 13. Explain the need for normalization with an example.

(or)

14. a. Describe the idea behind Domain-key normal form.
b. What is the Lossless join property of a decomposition? Why is it important?
15. Describe the Wait-die and Wound-wait protocols for deadlock prevention.

(or)

16. a. Explain the steps followed when a high-level query is processed. (8)
b. Write notes on Join operation. (4)
17. a. What are the different types of multimedia sources? (8)
b. How are multimedia sources indexed for content based retrieval? (4)

(or)

18. Explain the design & implementation issues for active databases.
19. Explain the approaches adopted in the design of deductive object oriented databases.

(or)

20. Describe the types of knowledge discovered during data mining.