LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – STATISTICS FIFTH SEMESTER – NOVEMBER 2009

ST 5403 - DATABASE MANAGEMENT SYSTEMS

Date & Time: 14/11/2009 / 9:00 - 12:00 Dept. No. Max. : 100 Marks

SECTION - A

Answer ALL questions

(10X 2 = 10)

- 1. Define database management systems.
- 2. What is transaction management?
- 3. Define the terms instances and schemas.
- 4. Write any two main functions of a database administrator.
- 5. What is meant by query evaluation engine?
- 6. Define the term file manager.
- 7. What are the clauses involved in the basic structure of an SQL?.
- 8. What is meant by referential integrating?
- 9. Define data mining.
- 10. What is meant by pattern evaluation module.

SECTION - B

(5 X 8 = 40)

Answer any FIVE questions

- 11. Explain the characteristics of the database system.
- 12. Describe the entity relationship model.
- 13. Explain the difference between physical and logical data independence.
- 14. Describe views and view definition in relational model.
- 15. Explain storage management.
- 16. Explain four different types of database –system users.
- 17. Describe the various components of the data warehousing.
- 18. Explain the following
 - (i) Subject oriented (ii) Integrated (iii) Non-volatile (iv) Time-variant

SECTION - C

 $(2 \times 20 = 40)$

Answer any TWO questions

- 19. Explain the terms primary key, candidate key and super key with examples and bring out the differences between them.
- 20. Construct an entity relationship diagram for a car-insurance company that has a set of customers, each of whom owns one or more cars. Each car has associated with it zero to any number of recorded accidents.
- 21. What are set operations? Explain the various set operations available in SQL with an example each.

22. Explain the following

- i) Operational data source(ODS)
- ii) Data Warehousing
- iii) Data Mart
- iv) Meta data.
