PS PT M.G.R. GOVERNMENT ARTS AND SCIENCE COLLEGE - SIRKALI

B.SC. COMPUTER SCIENCE - II YEAR

MODEL Question Paper

| Subject: DATABASE SYSTEMS | |
|---------------------------|------------|
| Code | : 16SCCCS4 |

PART - A

Time : 3 hours Marks: 75

5 * 5 = 25

3 * 10 = 30

Answer ALL the Questions.

10 * 2 = 20

- 1. What is database and DBMS? What are the applications of DBMS?
- 2. Write short notes on Database Languages.
- 3. Define Relational Data Model.
- 4. What are Relational Operations?
- 5. Write is short notes about KEYS.
- 6. Write the basic data types in SQL DDL.
- 7. Define basic structure of SQL queries.
- 8. What are the steps to creating a Database?
- 9. Define E-R Model.
- 10. What is Normalization?

PART - B

Answer ALL the Questions.

11. (a) Write the major advantages of DBMS. (or)

(b) Explain in detail about Data Abstraction.

12. (a) Write notes on database schema. (or)

(b)Explain Relational Algebra.

- 13. (a) Describe Basic Schema Definition with Example. (or)
 - (b) Define Views. How will to create views.
- 14. (a) Write notes on Transactions in SQL statements. (or)
 - (b) Explain different SQL Constraints with examples.
- 15. Explain (a). Tuple Relational Calculus. (or)

(b) Domain Relational Calculus.

PART - C

Answer Any THREE Questions.

16. (a) Explain the term

(i) Transaction Management (ii) Data Mining and Information Retrieval

(b) Describe the database architecture.

- 17. What is a Schema Diagram? Draw a schema diagram for the University Database. 18. Explain with example
 - (i) Set operation (ii) Join Expressions (iii) Aggregate Functions.
- 19. Explain in details about E-R Diagrams.
- 20. Explain Normal Forms in Relational Database Design.