

11. Describe the characteristics of SQL. Also, give the description of DDL and DML commands with examples.
12. What is Normalization ? Explain different anomalies associated with un-normalized database.
13. Design E-R diagram of library management system. Also explain the same.

MCA-07

December – Examination 2022

MCA Examination

Fundamental of Database Management System

Paper : MCA-07

Time : 3 Hours]

[Maximum Marks : 80

Note :- The question paper is divided into three Sections A, B and C. Write answers as per the given instructions.

Section-A

8×2=16

(Very Short Answer Type Questions)

Note :- Answer all questions. As per the nature of the question delimit your answer in one word, one sentence or maximum up to **30** words. Each question carries 2 marks.

1. (i) What do you mean by Database ?
(ii) What is Primary Key ?

- (iii) Write the syntax of SELECT query.
- (iv) Write the full form of SQL.
- (v) What is Cartesian product ? Give an example.
- (vi) What do you mean by weak entity ? Give an example.
- (vii) What is Data Dictionary ?
- (viii) Give an example of set-difference between *two* relations.

Section-B **4×8=32**

(Short Answer Type Questions)

Note :- Answer any *four* questions. Each answer should not exceed **200** words. Each question carries 8 marks.

- 2. Distinguish between DBMS approach and traditional file approach.
- 3. Define the concept of aggregation. Give an example where this concept is used.

- 4. Describe some basic data types used in SQL.
- 5. Explain some useful aggregate functions in SQL.
- 6. What do you mean by NULL Values ? How can be NULL values in a column be tested ? Explain with example.
- 7. What is Functional Dependencies ? Explain with suitable examples.
- 8. What is the difference between DROP TABLE command and TRUNCATE command ? Give examples.
- 9. Write short note on distributed database system.

Section-C **2×16=32**

(Long Answer Type Questions)

Note :- Answer any *two* questions. You have to delimit your each answer maximum up to **500** words. Each question carries 16 marks.

- 10. Explain the 3-tier architecture of database in detail. Also give its advantages.