

(6 pages)

**Reg. No.:**.....

**Code No. : 30177 E      Sub. Code : GMCS 64/  
GMSE 64**

B.Sc. (CBCS) DEGREE EXAMINATION,  
APRIL 2020.

Sixth Semester

Computer Science/ Software Engineering — Main

**RELATIONAL DATABASE MANAGEMENT SYSTEM**

(For those who joined in July 2012 - 2015)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer

1. The data base environment has all the following components except
  - (a) Users
  - (b) Separate files
  - (c) Database
  - (d) Database administrator

2. Hierarchical model is also called \_\_\_\_\_
- (a) Tree structure
  - (b) Plex structure
  - (c) Normalize structure
  - (d) Table structure
3. It is possible to define a schema completely using
- (a) VDL and DDL
  - (b) DDL and DML
  - (c) SDL and DDL
  - (d) VDL and DML
4. The statement in SQL which allows to change the definition of a table is
- (a) Alter                      (b) Update
  - (c) Create                     (d) Select
5. A data manipulation command that combines the records from one or more table is called \_\_\_\_\_
- (a) Select                      (b) Project
  - (c) Join                        (d) Product
6. Which of the following is valid SQL type?
- (a) Character                 (b) Numeric
  - (c) Float                      (d) All

7. In tuple relational calculus  $P_1 \rightarrow P_2$  is equivalent to \_\_\_\_\_
- (a)  $\neg P_1 \vee P_2$                       (b)  $P_1 \vee P_2$   
(c)  $P_1 \wedge P_2$                         (d)  $P_1 \wedge \neg P_2$
8. A subschema express
- (a) The logical view  
(b) The physical view  
(c) The external view  
(d) All the above
9. To delete a particular column in a relation the command used is \_\_\_\_\_
- (a) Update table  
(b) Truncate column  
(c) Alter, Drop  
(d) Delete column
10. \_\_\_\_\_ function divides one numeric expression by another and returns the remainder.
- (a) Power  
(b) MOD  
(c) ROUND  
(d) REMAINDER

PART B — (5 × 5 = 25 marks)

Answer ALL questions, by choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Write short notes on relational Database.

Or

- (b) Explain about transaction management.

12. (a) Explain about alter and update command.

Or

- (b) What are the arithmetic operations performed in SQL.

13. (a) Explain about various set operations in detail.

Or

- (b) Write short notes on Aggregate Functions.

14. (a) What is functional dependency? Explain 1NF and 2NF.

Or

- (b) Explain about Normalization

15. (a) Explain how to create views.

Or

- (b) Write short notes on functions.

PART C — (5 × 8 = 40 marks)

Answer ALL questions, by choosing either (a) or (b)

Each answer should not exceed 600 words.

16. (a) Explain:

(i) Data Storage

(ii) Querying

Or

(b) Explain in detail about db users and administrators.

17. (a) Write briefly about Relational Operations.

Or

(b) Write in detail about SQL.

18. (a) Explain:

(i) Nested Queries

(ii) Join Expression

Or

(b) Write in detail about SQL data type.

19. (a) Write about decomposition using functional dependencies.

Or

(b) Explain about BCNF and 3NF.

20. (a) Explain in detail about sequences.

Or

(b) What is Cursors? How they used in PL/SQL.

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