

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2022  
(Fifth Semester)

Branch – MATHEMATICS WITH COMPUTER APPLICATIONS

DATABASE MANAGEMENT SYSTEMS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 = 10)

1. A Relational Database consist of a collection of \_\_\_\_\_  
(i) Table (ii) Field (iii) Record (iv) Keys.
2. A \_\_\_\_\_ in a table represents a relationship among a set of values.  
(i) Column (ii) Key (iii) Row (iv) Entry
3. Which language can user request information from a Database?  
(i) Query (ii) Relational (iii) Structural (iv) Compiler
4. OLAP stands for \_\_\_\_\_  
(i) online analytical processing (ii) online analyzing processing  
(iii) online transaction processing (iv) online aggregate processing
5. The Most commonly used operation in relational algebra is \_\_\_\_\_  
(i) Storage cell (ii) buffer cell (iii) garbage cell (iv) Register Cell
6. Which are joint types on join condition \_\_\_\_\_  
(i) Cross join (ii) Nature join  
(iii) Join with USING clause (iv) All the Above
7. \_\_\_\_\_ of the following makes the transaction permanent in the Database  
(i) View (ii) Commit (iii) Rollback (iv) Flashback
8. \_\_\_\_\_ is used to remove the privileges from the user X  
(i) Remove update on department from userX  
(ii) Revoke update on employee from userX  
(iii) Delete select on department from userX  
(iv) Grand update on employee from userX
9. The Components of a ER Model has \_\_\_\_\_  
(i) Entity (ii) Attribute (iii) Relationship (iv) All the Above
10. Which of the following symbols represent entity sets in an ER diagram \_\_\_\_\_  
(i) Divided rectangles (ii) Diamonds  
(iii) Lines (iv) Undivided rectangles

SECTION - B (25 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 5 = 25)

11. a) What do you mean by view of Data in SQL.

(OR)

b) What are the Data – Manipulated Language?

12. a) Listout the Basic Types in SQL Standards.

(OR)

b) Explain about the Basic Structure of SQL Queries.

Cont...

13. a). Discuss about the Aggregation with Grouping in SQL.

(OR)

b) Describe the concept of Scalar Sub queries.

14. a) Write short notes on the Design Phase.

(OR)

b) Explain about the Large – Object Types in SQL.

15. a) Write about the representation of Relationship Set with Suitable Examples.

(OR)

b) What is Design Phase in SQL?

**SECTION – C (40 marks)**

Answer ALL Questions

All Questions carry EQUAL Marks (5 X 8 = 40 marks)

16. a) Discuss about the Data – Definition Language in detail.

(OR)

b) Write about Database Architecture in Detail.

17. a) Explain the Natural Join in Basic Structure in SQL.

(OR)

b) Elaborate about the Null Values in SQL with Sample Queries.

18. a) Discuss about the Join Expressions and its Conditionals in detail.

(OR)

b) Elaborate about the Integrity Constraints and Relations in SQL.

19. a) Explain about the Roles and revoking of Privileges in SQL.

(OR)

b) Elaborate about the Embedded SQL.

20. a) Briefly explain about the Entity Set in E- R Model.

(OR)

b) Explain the concept of Mapping Coordinates in Constraints.

Z-Z-Z

END