

(FOR THE CANDIDATES ADMITTED  
DURING THE ACADEMIC YEAR 2021 ONLY)

21UBC307

REG.NO. :

**N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI**  
**END-OF-SEMESTER EXAMINATIONS : DECEMBER-2022**

**COURSE NAME : B.C.A**

**MAXIMUM MARKS: 70**

**SEMESTER : III**

**TIME : 3 HOURS**

**PART – III**

**RELATIONAL DATABASE MANAGEMENT**

**SECTION - A**

**(10 X 1 = 10 MARKS)**

**ANSWER THE FOLLOWING QUESTIONS.**

**MULTIPLE CHOICE QUESTIONS.**

**(K1)**

1. Which of the following is represented by Rectangle in an Entity-Relations Diagram?  
A) Entity sets                      B) Attributes                      C) Database                      D) Tables
2. In a relational schema, each tuple is divided into fields called-----  
A) Relations                      B) Domains                      C) Queries                      D) tuples
3. To eliminate duplicate rows.....is used in SQL.  
A) NO DUPLICATE    B) ELIMINATE                      C) DISTINCT                      D) DELETE
4. ....specifies a search condition for a group or an aggregate.  
A) GROUPBY Clause    B) HAVING Clause    C) FROM Clause                      D) WHERE Clause
5. A data dictionary is a repository that manages\_\_\_\_\_.  
A) Database                      B) Memory                      C) Metadata                      D) File.

**ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES.**

**(K2)**

6. Write the difference between file system and Database system.
7. Define primary key.
8. What is authorization?
9. List some Group functions of SQL.
10. What is Trigger in SQL?

**SECTION – B**

**(5 X 4 = 20 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)**

11. a) Describe the concept of level of abstraction with example.

**(OR)**

- b) Narrate the concept of Database users and administrators.

- 12.a) Examine the structure of Relational database with example,

**(OR)**

- b) Write short notes on selection and projection operator with example.

- 13.a) List the various Integrity constraints with example.

**(OR)**

- b) Illustrate BCNF with example.

**(CONTD.....2)**

14.a) Classify the character functions in SQL with example.

(OR)

b) Discuss in detail the set operators in SQL with example.

15.a) Demonstrate the Architecture of PL/SQL .

(OR)

b) Narrate the concept of looping statement in PL/SQL block with example.

**SECTION - C**

**(4 X 10 = 40 MARKS)**

**ANSWER ANY FOUR OUT OF SIX QUESTIONS**

**(16<sup>th</sup> QUESTION IS COMPULSORY AND ANSWER ANY THREE QUESTIONS**

**(FROM Qn. No : 17 to 21)**

**(K4 (Or) K5)**

16. Construct an ER diagram for Banking Organaization and explain it.

17. Summarize in detail about the Architecture of DBMS with neat Diagram.

18. Examine the Operation of Join operator with any two tables

19. Discuss i) First Normal Form, ii) Second Normal Form, iii) Third Normal Form with suitable examples.

20. Create a table for Employees and update the table for adding the email and calculate the hra.

21. Define Procedure in PL/SQL and explain it with example.

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