(FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR 2024 ONLY)

24UCC307

REG.NO.:

N.G.M.COLLEGE (AUTONOMOUS): POLLACHI
END-OF-SEMESTER EXAMINATIONS: NOVEMBER-2025

B.Com.-C.A **MAXIMUM MARKS: 75**
SEMESTER: III **TIME : 3 HOURS**

PART-III
RELATIONAL DATABASE MANAGEMENT SYSTEM AND ORACLE

SECTION – A (10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.
MULTIPLE CHOICE QUESTIONS. **K1**

1. The collection of information stored in the database at a particular moment is called _____.
   a) Instance b) Schema c) Attribute d) Tuple

2. Which of the following is a component of an E-R model?
   a) Tables b) Entities c) Queries d) Indexes

3. Which SQL function is used to return the current date in Oracle?
   a) NOW( ) b) SYSDATE c) CURRENT_DATE( ) d) GETDATE( )

4.What command in SQL*Plus sets the number of lines per page in output?
   a) SET LINESIZE b) SET PAGESIZE c) SET FORMAT d) SET WIDTH

5. Which of the following is a valid section of a PL/SQL block?
   a) CHECK b) WHEN c) DECLARE d) SELECT

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES. **K2**

6. What is the role of a Database Administrator**?**
7. What is data independence in DBMS?
8. Define a Primary Key. Can a table have more than one primary key.
9. Define a sub-query and give one simple example.
10. What is PL/SQL? Mention any two advantages.

SECTION – B (5 X 5 = 25 MARKS)

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

11. a) List and explain the advantages of using a DBMS over a file-based system.

(OR)

b) Briefly explain the types of database users and their roles.

12. a) Explain the three levels of database abstraction with a neat diagram.

(OR)

b) Explain different types of data types used in databases with examples.

(CONTD……2)

13. a) State the functionalities with SQL queries demonstrating the use of GROUP BY and HAVING clauses.

(OR)

b) Discuss the use and syntax of Set Operators in Oracle with examples for UNION, INTERSECT, and MINUS.

14. a) What is an index? Explain the types of indexes used in Oracle.

(OR)

b) List and explain SQL*Plus formatting commands for setting titles, computing totals, and page layout.

15. a) Describe the different control structures in PL/SQL with a clear example.

(OR)

b) Explain explicit and implicit cursors with examples.

SECTION – C (5 X 8 = 40 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. K4 & K5

16. a) Describe the components and functions of a DBMS.

(OR)

b) Write short notes on the following:

i) Transaction Management ii) Data Dictionary

17. a) Design an ER diagram for a college management system. Clearly mention entities, relationships, and cardinalities.

(OR)

b) Explain with a neat diagram explain the architecture of a DBMS. How does it support data abstraction and independence?

18. a) Discuss in detail the concept of joins in SQL. Using a sample database, write queries with using INNER JOIN, LEFT &RIGHT OUTER JOINS, and FULL OUTER JOIN.

(OR)

b) Create a sample database schema using DDL statements and demonstrate insertion and retrieval using DML.

19. a) Explain in detail the creation and usage of database objects: Tables, Views, Synonyms, Sequences, and Indexes.

(OR)

b) Describe the concept of locking in Oracle databases. Explain different lock modes and how deadlocks can be avoided.

20. a) Describe in detail the types of exceptions in PL/SQL and how to handle them effectively.

(OR)

b) Describe the components of Oracle Forms and their interaction in form construction.

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ETHICAL PAPER