

Course	: BCA	Date	: 22-Feb-2026
Subject Code	: BCAMA-303	Time	: 11:30am to 01.45pm
Subject Name	: Relational Database Management system (RDBMS)	Duration	: 02.15 Hours
		Max. Marks	: 70

1. Explain basic concepts of data, database, database system, and DBMS. Discuss the purpose and advantages of DBMS over file systems.
2. Explain the architecture of DBMS and describe various components of DBMS.
3. Explain data models and data modeling & mapping. Describe tables, tuples, attributes, and domains
4. Explain the database design process and discuss different anomalies in a database
5. Explain functional dependency and describe the process of finding candidate keys using Armstrong's rules.

1. Explain stages of normalization: 1NF, 2NF, 3NF, and BCNF with examples.
2. Explain ORACLE server and instances. Describe database structure and space management
3. Explain memory and process structure in ORACLE. Describe schemas and schema objects.
4. Explain DDL, DML, and TPL commands with suitable examples.
5. Explain indexes, views, sequences, and synonyms in ORACLE.
6. Write a short note on database backup and recovery and ORACLE utilities (Import & Export).

Part – A (Multiple Choice Questions) (10)

- 1 Which of the following is not a component of DBMS?
A Query processor B Storage manager
C File manager D Compiler
- 2 Which normal form removes partial dependency?
A 1NF B 2NF
C 3NF D BCNF

- 3 Which command is used to remove a table?
A DELETE B DROP
C TRUNCATE D REMOVE
- 4 Which key uniquely identifies a record?
A Foreign key B Candidate key
C Primary key D Secondary key
- 5 Which ORACLE object stores executable SQL code?
A View B Trigger
C Index D Sequence
- 6 Which function returns current system date in ORACLE?
A SYSDATE B CURRENT_DATE
C NOW D GETDATE
- 7 Which clause is used to group records?
A WHERE B GROUP BY
C HAVING D ORDER BY
- 8 Which join returns common records from tables?
A Left join B Right join
C Full join D Inner join
- 9 9. Which PL/SQL block handles runtime errors?
A Declare B Begin
C Exception D End
- 10 Which command gives permission to users?
A REVOKE B GRANT
C COMMIT D SAVEPOINT

Part – B (Do as Directed)

(10)

- 1 Define DBMS.
- 2 What is a tuple?
- 3 Define functional dependency.
- 4 Expand BCNF.
- 5 What is DML?
- 6 Name any one ORACLE inbuilt function.
- 7 What is a trigger?
- 8 Define cursor.
- 9 What is exception handling?
- 10 What is a role in ORACLE?
