



73

Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD (now MoE)
Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC
Coimbatore - 641043, Tamil Nadu, India

Bachelor's Degree Examination - November 2025 I Semester

Class : I UG
Major : B. Com Computer Applications

Time : 3 Hours
Max.Marks : 100

23BCCC03 RDBMS and Structured Query Language

Course Outcomes:

- CO1: Gain a solid understanding of fundamental database concepts including data modelling, normalization and the relational model.
CO2: Able to design and create a relational database including defining tables, relationships and constraints.
CO3: Employ commands to create, update, manage, retrieve and control database.
CO4: Provide an insight into design referential integrity using triggers.
CO5: Illustrate SQL operators, constraints and clauses to manage multifaceted data and to implement various built-in functions of SQL.

Part A

10 x 1 = 10

Choose the Correct Answer

- Which of the following is a type of data model? CO1 K1
a. Relational b. Hierarchical c. Network d. All of the above
- Which of the following is not a database language? CO1 K1
a. DDL b. DML c. HTML d. TCL
- What is the default length of a NUMBER data type if precision is not specified? CO2 K2
a. 38 b. 2 c. 1 d. 10
- Which SQL command is used to create a table? CO2 K2
a. ALTER b. UPDATE c. CREATE d. SELECT
- Which function returns the number of rows in a result set (including duplicates)? CO3 K1
a. SUM () b. COUNT ()
c. MAX () d. AVG ()
- Which SQL clause is used to filter rows in a table based on a condition? CO3 K1
a. ORDER BY b. GROUP BY
c. WHERE d. HAVING
- Which SQL clause is used to combine rows from two or more tables? CO4 K1
a. SELECT b. JOIN
c. GROUP BY d. WHERE
- Which is used to pass values into a PL/SQL block dynamically? CO4 K1
a. Literal b. Cursor
c. Bind Variable d. View
- Which section is optional in a PL/SQL block? CO5 K2
a. DECLARE b. BEGIN
c. EXCEPTION d. END
- What is the correct order of cursor operations? CO5 K2
a. FETCH → OPEN → CLOSE b. OPEN → FETCH → CLOSE
c. DECLARE → CLOSE → FETCH d. FETCH → CLOSE → OPEN

Part B

5 x 6 = 30

Answer ALL questions

Each answer should not exceed 400 words or two pages

11. a. Explain the purpose and advantages of using a Database Management System
(or)
11. b. Differentiate between logical and physical data independence. CO1 K3
12. a. List out the different data types available in Oracle .
(or)
12.b. Write a SQL query to display the structure of a table. CO2 K4
13. a. How does the ORDER BY clause affect query results?
(or)
13.b. Show how to use the DISTINCT keyword in SQL. When is it useful? CO3 K3
14. a. Interpret the difference between the INNER JOIN and LEFT OUTER JOIN
(or)
14.b. Explain how bind variables are used in PL/SQL . CO4 K3
15. a. Assess the structure and use of a simple cursor .
(or)
15.b. Write a PL/SQL block using IF-THEN-ELSE structure . CO5 K4

Part C

5 x 12 = 60

Answer ALL questions

Each answer should not exceed 800 words or four pages

16. a. Explain the concept of Data Modeling. Discuss E-R diagram components .
(or)
16.b. Discuss the various types of database languages and their uses . CO1 K4
17. a. Outline the various DDL commands in Oracle with syntax .
(or)
17.b. Create an employee table and write SQL commands to:
(i) Add a column
(ii) Rename the table
(iii) Drop a column
(iv) Truncate the table CO2 K4
18. a. Interpret the logical operators and comparison operators in SQL .
(or)
18.b. Elaborate the concept of DML and commands with syntax . CO3 K4
19. a. Demonstrate SQL control structures with an example.
(or)
19.b. Explain sub queries in SQL. Write examples for both single-row and multi-row sub queries. CO4 K4
20. a. Explain in detail PL/SQL triggers. Write a BEFORE INSERT trigger,
(or)
20.b. Classify the different types of exceptions in PL/SQL . CO5 K4