



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)
Re-accredited with 'A++' Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment Test I – August 2025
V SEMESTER

Class : III UG
Major : Computer Applications

Time: 2 hours
Maximum Marks: 60

23BCAC09 Relational Database Management Systems

Course Outcomes:

- CO1: Become familiar with the database management systems.
CO2: Understand the functional dependencies and design of the relational database.
CO3: Master the basics of SQL and construct queries using SQL.
CO4: Design a relational database schema using SQL for a given problem-domain.
CO5: Recognize the concept of concurrency control of database processing.

Part-A
Choose the correct answer

6x1=6

1. What is a relation in RDBMS?
a. Key b. Table c. Row d. Data Types CO1 K1
2. Which of the following systems use RDBMS?
a. Oracle b. Microsoft SQL Server c. IBM d. All of the mentioned CO1 K2
3. An _____ is a set of entities of the same type that share the same properties or attributes
a. Entity set b. Attribute set c. Relation set d. Entity model CO2 K1
4. Which of the normal form converts composite attribute to individual attributes?
a. First b. Second c. Third d. Fourth CO2 K2
5. Functional dependencies are the types of constraints that are based on _____ ?
a. Key b. Key revisited c. Superset key d. None of the mentioned CO2 K3
6. Which operator performs pattern matching?
a. Like operator b. Between operator c. Exists operator d. none of these CO3 K1

Part- B
Answer ALL Questions

3x6=18

7. a. Explain in detail about three-schema architecture. CO1 K1
(or)
7. b. Discuss about the DBMS Interfaces. CO1 K2
8. a. Write in brief about Functional dependency with inference rules CO2 K2
(or)
8. b. Discuss about Boyce-Codd Normal form with example. CO2 K1
9. a. Discuss on the features of SQL. CO3 K2
(or)
9. b. Write about GROUP BY and HAVING clause in SQL. CO3 K1

Part-C
Answer ALL questions

3x12=36

10. a. Explain with example the Entity Relationship model with example. CO1 K1
(or)
10. b. Explain about the importance of Database System Environment. CO1 K1
11. a. What is normalization? Explain first three types of normal forms. What are the problems caused by redundancy? Explain the need for normalization. CO2 K2
(or)
11. b. Elaborate on Concurrency control techniques. CO2 K1
12. a. Explain about various integrity constraints in DBMS each with an example. CO3 K2
(or)
12. b. List the types of SQL commands. Explain each command in detail with an example. CO3 K1

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