



3/2/26
Jamballa

Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd.u/s 3of UGC Act 1956, Category A by MHRD [now MoE]

Re-accredited with an A++ Grade by NAAC CGPA 3.65/4, Category I by UGC

Coimbatore-641043, Tamil Nadu, India

Continuous Internal Assessment I –February -2026

Semester IV

Class : II UG
Major :B.COM IT

Time : 2 Hours

Max. Marks: 60

23BCOSE2IT-Database management system with SQL

Course Outcomes:

CO1: Describe the fundamental elements of database management systems

CO2: Apply SQL commands for view and decision making.

CO3: Design ER-models to represent simple database application scenario

CO4: Improve the database design by normalization.

CO5: Familiar with basic database storage structures by adopting suitable method of file organisation

Part A

6 x 1 = 6

Choose the Correct Answer

- 1.Which system provides better data security? CO1K1
a.File System b. DBMS c. Operating System d. Compiler
- 2.Which of the following is a disadvantage of the file system? CO1K1
a. Data redundancy b. Data consistency c. Data sharing d. Centralized control
- 3 . Which symbol represents an Entity in an ER diagram? CO2K1
a. Oval b. Rectangle c. Diamond d. Line
- 4 . Which of the following is NOT a component of ER model? CO2K1
a. Entity b. Attribute c. Relationship d. Table
5. Which of the following violates 1NF? CO3K1
a. Atomic attributes b. Multivalued attributes c. Primary key d. Foreign key
6. Second Normal Form (2NF) eliminates CO3K1
a. Transitive dependency b. Partial dependency c. Multivalued dependency d. Join dependency

Part B

3 x 6 = 18

Answer ALL questions

The answer should not exceed 400 words or two pages

7. a. Explain the Database System in detail with suitable examples. CO1K2
(or)
7. b. Differentiate between OLAP and OLTP systems. CO1K2
8. a. Explain the components and attributes of ER Modeling in brief CO2K2
(or)
- 8 .b. Describe the steps involved in drawing an ER Diagram. CO2K2
- 9.a. Explain the concept of Normalization in brief. CO2K2
(or)
- 9 .b. Write an SQL program using loop statements with a suitable example. CO3K3

Part C

3 x 12 = 36

Answer ALL questions

The answer should not exceed 800 words or four pages

- 10.a.Explain briefly on the Architecture of DBMS with a neat diagram. CO1K2
(or)
- 10.b. Discuss the concept of Schema and explain its structure and types in detail. CO1K2
- 11 .a. Explain ER Modeling and discuss the types of relationships used in ER Modeling with examples. CO2K2
(or)
- 11.b. Write an SQL program to create a Student table and demonstrate the use of ALTER, DELETE, and UPDATE commands. CO2K4
- 12 .a. Explain the different Normal Forms of Normalization in detail with examples. CO3K2
(or)
- 12 .b. Write programs for the following concepts: CO3K4
a) SQL program using an IF statement
b) SQL program demonstrating Exception Handling
