**SRM Institute of Science and Technology**

**College of Engineering and Technology**

**School of Computing**

SRM Nagar, Kattankulathur – 603203, Chengalpattu District, Tamilnadu

**Academic Year: 2023-24 (EVEN) BATCH-2 SET – A**

**Test: CLA-T2** **Date: 22-03-2024**

**Course Code & Title: 18CSC303J & Database Management Systems** **Duration:** 2 Periods

**Year & Sem: III Year / VI Sem** **Max. Marks:** 50

**Course Articulation Matrix:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S.**  **No.** | **Course Outcome** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** | **PSO3** |
| 1 | **CO1** | 3 | 2 | 2 | - | - | - | - | - | - | - | - | - | 2 | 2 | - |
| 2 | **CO2** | 3 | 2 | 2 | - | - | - | - | - | - | - | - | - | 2 | 2 | - |
| 3 | **CO3** | 3 | 3 | 3 | - | - | - | - | - | - | - | - | - | 2 | 2 | - |
| 4 | **CO4** | 3 | 3 | 3 | 2 | - | - | - | - | - | - | - | - | 2 | 2 | - |
| 5 | **CO5** | 3 | 2 | 2 | - | - | - | - | - | - | - | - | - | 2 | 2 | - |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Part - A**  **(20 x 1 = 20 Marks)**  **Instructions: Answer all** | | | | | | |
| **Q. No** | **Question** | **Marks** | **BL** | **CO** | **PO** | **PI Code** |
| 1 | SQL is a \_\_\_\_\_ used for querying and manipulating databases.  a. Procedural language b. Object-oriented language  **c. Declarative language** d. Low-level language | 1 | L1 | 2 | 1 | 1.6.1 |
| 2 | What are attributes in the context of an E-R model.?  a. Unique functions of entities  **b. Descriptive properties possessed by each member of an entity set**  c. Relationships between entities  d. Operations performed on entities | 1 | L2 | 2 | 2 | 1.7.1 |
| 3 | What does ‘1: N’ represent in a one-to-many relationship in database design?   1. **Each entity in the first set can be associated with multiple entities in the second set.** 2. Each entity in the first set can be associated with only one entity in the second set. 3. Each entity in the second set can be associated with multiple entities in the first set. 4. There is no relationship between the entities in the first set and the entities in the second set. | 1 | L1 | 2 | 2 | 1.7.1 |
| 4 | A \_\_\_\_\_\_\_\_\_ that cannot exist without being related to another entity.   1. Strong entity **b .Weak entity** 2. Association entity d. Attribute entity | 1 | L1 | 2 | 1 | 1.7.1 |
| 5 | \_\_\_\_\_\_\_\_\_\_ is the primary focus of a high-level data model in database design.   1. Specifying physical storage details. 2. Removing redundant features. 3. **Describing data and their relationships**. 4. Translating requirements into a conceptual schema. | 1 | L1 | 2 | 2 | 1.6.1 |
| 6 | In a university database system, consider the following scenario:   * There are three entity sets: Student, Faculty, and Department. * Each student is assigned a department counselor (coordinator) from the Faculty. * A Faculty member can serve as a counselor for multiple students. * Additionally, each Department has a designated department counselor   Based on this scenario, which of the following statements about binary relationship sets is correct?   1. **The binary relationship set between Student and Faculty is a one-to-many relationship**. 2. The binary relationship set between Student and Department is a many-to-many relationship. 3. The binary relationship set between Faculty and Department is a one-to-many relationship. 4. The binary relationship set between Student and Faculty is a many-to-many relationship. | 1 | L1 | 2 | 1 | 1.7.1 |
| 7 | Which of the following is not a point to be considered for converting an ER diagram into tables in the relational model?   1. Strong Entity Set with Only Simple Attributes. 2. Strong Entity Set with Composite Attributes. 3. Strong Entity Set with Multi-Valued Attributes. 4. **Strong Entity Set with Derived Attributes** | 1 | L1 | 2 | 2 | 1.6.1 |
| 8 | Which of the following components is typically included in an Entity-Relationship (ER) model?   1. Stored procedures and triggers. 2. Indexes and partitions. 3. **Primary keys and foreign keys**. 4. Query optimization techniques. | 1 | L1 | 2 | 1 | 1.7.1 |
| 9 | What does the fully developed database design provide?   1. Technical requirements. 2. **Functional requirements.** 3. Operational procedures. 4. Data storage specifications. | 1 | L1 | 2 | 2 | 1.7.1 |
| 10 | What is total participation in an entity set's participation in a relationship set?   1. When only some entities in the entity set participate in relationships in the relationship set. 2. When no entities in the entity set participate in relationships in the relationship set. 3. **When every entity in the entity set participates in at least one relationship in the relationship set.** 4. When the participation of entities in the entity set is optional in the relationship set. | 1 | L1 | 2 | 1 | 1.7.1 |
| 11 | Which of the following is not Constraint in SQL?  (a)Primary Key (b) Not Null (c) Check **(d) Union** | 1 | L2 | 4 | 2 | 2.1.2 |
| 12 | Which SQL built-in function is used to return the smallest integer value that is greater than or equal to a specified numeric expression?  **a) Ceiling()** b) Round() c) Floor() d) Avg() | 1 | L2 | 4 | 2 | 2.1.2 |
| 13 | Which SQL string function is used to return a specified number of characters from a string, starting from a specified position?  a) Substring() b) Mid() c) Trim() d) Left() | 1 | L2 | 4 | 2 | 2.1.2 |
| 14 | If E1, E2,..., En are entity sets, then a relationship set R is a \_\_\_\_\_\_of {(e1,e2,...,en) | e1 ∈ E1,e2 ∈ E2,...,en ∈ En} where (e1,e2,...,en) is a relationship.  a) superset b) union **c) subset** d) intersection | 1 | L2 | 4 | 2 | 2.1.2 |
| 15 | Which SQL numeric/date/time function is used to add a specified number of days to a date?  a) Add\_Days() **b) Dateadd()** c) Day\_Add()  d) Increase\_Date() | 1 | L2 | 4 | 2 | 2.1.2 |
| 16 | The number of types of Exceptions in PL/SQL is  **a)2** b) 4 c)0 d)5 | **1** | **L1** | **4** | **1** | **1.6.1** |
| 17 | Which statement result of not creating an exception handler for a raised exception?   1. a) The program will continue without raising the exception. b) There will be a memory leak.   **C) Control will pass to the PL/SQL block caller’s exception handler**.  d) The program will return a %notfound error. | **1** | **L1** | **4** | **1** | **1.7.1** |
| 18 | THE \_\_\_\_\_ clause specifies the table name on which the trigger is to be attached. The \_\_\_\_\_\_ specifies that this is an AFTER INSERT trigger.  a) For insert, on **b) On, for insert**  c) For, insert d) On, whichUPPER bound | **1** | **L1** |  | **1** | **1.7.1** |
| 19 | A \_\_\_\_\_\_\_\_\_\_ is a special kind of a store procedure that executes in response to certain action on the table like insertion, deletion or updation of data.   1. Procedures **b) Triggers**   c) Functions d) Cursors | **1** | **L1** | **4** | **1** | **1.7.1** |
| 20 | Which of the following is NOT an Oracle-supported trigger?  a)BEFORE **b)DURING** c)AFTER d) INSTEAD OF | **1** | **L2** | **4** | **1** | **1.6.1** |



**Approved by the Audit Professor/Course Coordinator**