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| --- | --- |
| QN=1 | The conceptual model is |
| a. | Dependent on hardware |
| b. | Dependent on software |
| c. | Dependent on both hardware and software |
| d. | Independent of both software and hardware |
| e. |  |
| f. |  |
| Answer: | d |
| Mark: |  |
| Unit: | 4 |
| Mix choices: | Yes |

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| QN=2 | When the number of entities are borrowed together into one entity based on their similar characteristics, what is this process called? |
| a. | Generalization |
| b. | Specialization |
| c. | Inheritance |
| d. | Abstraction |
| e. |  |
| f. |  |
| Answer: | a |
| Mark: |  |
| Unit: | 4 |
| Mix choices: | Yes |

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| QN=3 | Consider the following Statements:  (1) An Entity Integrity constraint states that the primary key value cannot be null.  (2) A referential integrity constraint is specified between two relations.  (3) A foreign key cannot be used to refer to its own relation.  Which of the above statements are correct? |
| a. | Only (1) |
| b. | Only (2) |
| c. | Only (2) and (3) |
| d. | Only (1) and (2) |
| e. |  |
| f. |  |
| Answer: | d |
| Mark: |  |
| Unit: | 4 |
| Mix choices: | Yes |

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| QN=4 | Which of the following is a component of the relational data model included to specify business rules to maintain the integrity of data when they are manipulated? |
| a. | Business rule constraint |
| b. | Data integrity |
| c. | Business integrity |
| d. | Data structure |
| e. | Entity integrity |
| f. |  |
| Answer: | b |
| Mark: |  |
| Unit: | 4 |
| Mix choices: | Yes |

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| --- | --- |
| QN=5 | What should we do when converting the 1-M binary relationship into tables? |
| a. | Create a table with all attributes from both entities |
| b. | Add foreign key to the many side referencing to the parent (1 side) |
| c. | Add foreign key to the 1 side referencing to the child (M side) |
| d. | Add foreign key to all of tables |
| e. |  |
| f. |  |
| Answer: | b |
| Mark: |  |
| Unit: |  |
| Mix choices: | Yes |

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| QN=6 | What is the output of conceptual design model |
| a. | ER diagram |
| b. | Relational database schema |
| c. | Technical specifications for construction of the database |
| d. | None of the others |
| e. |  |
| f. |  |
| Answer: | a |
| Mark: |  |
| Unit: | 4 |
| Mix choices: | Yes |

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| QN=7 | The difference between PRIMARY KEY constraint and UNIQUE constraint is: |
| a. | The data of field has UNIQUE constraint that can be NULL, otherwise to PRIMARY KEY constraint |
| b. | The data of field has PRIMARY constraint that can be NULL, otherwise to UNIQUE constraint |
| c. | These constraints are not different. |
| d. | None of the others. |
| e. |  |
| f. |  |
| Answer: | a |
| Mark: |  |
| Unit: | 6 |
| Mix choices: | Yes |

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| QN=8 | A domain of CustomerType attributes in Customer relation have 3 types: VIP, NOR, POT. Which statement is used to validate the data entries?(Note: VIP: very important; NOR: normal; POT: potential) |
| a. | …CHECK CustomerType IN(‘VIP’,’NOR’,’POT’) |
| b. | …CHECK CustomerType =’VIP’, ‘NOR’, ‘POT’ |
| c. | …CHECK (CustomerType = ‘VIP’ AND CustomerType = ‘NOR’ CustomerType = ‘POT’) |
| d. | None of the others |
| e. |  |
| f. |  |
| Answer: | a |
| Mark: |  |
| Unit: | 6 |
| Mix choices: | Yes |

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| QN=9 | Which statement is use to add FOREIGN KEY constraint into Student table (IdClass is a foreign key which refer to Class table) |
| a. | ALTER TABLE Student  ADD CONSTRAINT FKStudent FOREIGN KEY(IdClass)  REFERENCES Class(IdClass) |
| b. | ALTER TABLE Student  ADD FOREIGN KEY(IdClass) REFERENCES Class(IdClass) |
| c. | ALTER TABLE Student  ADD FKStudent FOREIGN KEY(IdClass)  REFERENCES Class(IdClass) |
| d. | None of the others |
| e. |  |
| f. |  |
| Answer: | a |
| Mark: |  |
| Unit: | 6 |
| Mix choices: | Yes |

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| QN=10 | Selecting the victim to be rollbacked to the previous state is determined by the minimum cost. The factors determining cost of rollback is |
| a. | How long the transaction has computed, and how much longer the transaction will compute before it completes its designated task. |
| b. | How many data items the transaction has used |
| c. | How many more data items the transaction needs for it to complete |
| d. | All of these answers |
| e. |  |
| f. |  |
| Answer: | d |
| Mark: |  |
| Unit: | 7 |
| Mix choices: | Yes |

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| QN=11 | What is the property of a transaction which ensures that either all operations of the transaction are reflected properly in the database or none? |
| a. | Atomicity |
| b. | Durability |
| c. | Isolation |
| d. | Consistency |
| e. | Deadlock |
| f. |  |
| Answer: | a |
| Mark: |  |
| Unit: | 7 |
| Mix choices: | Yes |

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| QN=12 | Which of the following is a comparison operator in SQL? |
| a. | = |
| b. | LIKE |
| c. | BETWEEN |
| d. | All of the answers |
| e. |  |
| f. |  |
| Answer: | d |
| Mark: |  |
| Unit: |  |
| Mix choices: | Yes |

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| QN=13 | This index reorders the physical order of the table and searches based on the basis of key values. What is the type of index? |
| a. | Unique Index |
| b. | Clustered Index |
| c. | Non-Clustered Index |
| d. | None of the answers |
| e. |  |
| f. |  |
| Answer: | b |
| Mark: |  |
| Unit: | 7 |
| Mix choices: | Yes |

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| QN=14 | What type of function returns the unit, not a table? |
| a. | Scalar Functions |
| b. | Inline Table-valued functions |
| c. | Multi-statement valued functions |
| d. | All of the answers |
| e. |  |
| f. |  |
| Answer: | a |
| Mark: |  |
| Unit: | 9 |
| Mix choices: | Yes |

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| QN=15 | Which of the following group functions ignore NULL values? |
| a. | MAX |
| b. | SUM |
| c. | COUNT |
| d. | All of these answers |
| e. |  |
| f. |  |
| Answer: | d |
| Mark: |  |
| Unit: | 6 |
| Mix choices: | Yes |

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| QN=16 | Suppose you want to compare three keys (‘Primary Key’, ‘Super Key’ and ‘Candidate Key’) in a database. Which of the following option(s) is/are correct?  (1)Minimal super key is a candidate key  (2)Only one Candidate Key can be Primary Key  (3)All super keys can be a candidate key  (4)We cannot find “Primary Key” from “Candidate Key” |
| a. | (1) & (2) |
| b. | (1) & (3) |
| c. | (2) & (3) |
| d. | (3) & (4) |
| e. |  |
| f. |  |
| Answer: | a |
| Mark: |  |
| Unit: | 4 |
| Mix choices: | Yes |

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| QN=17 | Which of the following statement(s) is/are true about “HAVING” and “WHERE” clauses in SQL?   1. WHERE” is always used before “GROUP BY” and HAVING after “GROUP BY” 2. WHERE” is always used after “GROUP BY” and “HAVING” before “GROUP BY” 3. “WHERE” is used to filter rows but “HAVING” is used to filter groups 4. “WHERE” is used to filter groups but “HAVING” is used to filter rows |
| a. | (1) & (4) |
| b. | (1) & (3) |
| c. | (2) & (3) |
| d. | (2) & (4) |
| e. |  |
| f. |  |
| Answer: | b |
| Mark: |  |
| Unit: | 6 |
| Mix choices: | Yes |

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| QN=18 | Which of the following is true for TRUNCATE in SQL? |
| a. | It is usually slower than DELETE command |
| b. | It is usually faster than DELETE command |
| c. | There is no comparison between DELETE & TRUNCATE |
| d. | Truncate command can be rolled back |
| e. |  |
| f. |  |
| Answer: | b |
| Mark: |  |
| Unit: | 6 |
| Mix choices: | Yes |

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| QN=19 | In the language constructs for procedures, PSM stands for |
| a. | Permanent Storage Module |
| b. | Persistent Storage Module |
| c. | Prepared statement module |
| d. | Prepared storage module |
| e. |  |
| f. |  |
| Answer: | b |
| Mark: |  |
| Unit: | 8 |
| Mix choices: | Yes |

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| QN=20 | The main purpose of Indexes using in DBMS is |
| a. | Providing a quicker way to store data |
| b. | Decreasing the amount of disk space utilized |
| c. | Providing rapid, random and sequential access to base-table data |
| d. | Increasing the cost of implementation |
| e. | Decreasing the cost of implementation |
| f. |  |
| Answer: | c |
| Mark: |  |
| Unit: | 7 |
| Mix choices: | Yes |

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| QN=21 | Which of the following types of index is automatically created combining with the primary key when we do not specify? |
| a. | Bitmap |
| b. | Balanced Tree index |
| c. | Binary tree index |
| d. | Hashed |
| e. | Sparse index |
| f. |  |
| Answer: | B |
| Mark: |  |
| Unit: | 7 |
| Mix choices: | Yes |

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| QN=22 | Which of the following statements is true? |
| a. | A weak entity set may exist without participation in any relationship |
| b. | A weak entity should participate in relationship with another weak entity set |
| c. | A weak entity set should participate in relationship with at least one strong entity set |
| d. | Weak entity sets have no primary key that is derived from the parent entity in the binary relationship with at least one strong entity set. |
| e. |  |
| f. |  |
| Answer: | d |
| Mark: |  |
| Unit: | 4 |
| Mix choices: | Yes |

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| QN=23 | Which statement is used to modify the value of Address in table Student selected from Addr column in table EnrollmentInformation ? |
| a. | UPDATE Student  SET Address = (SELECT Addr FROM EnrollmentInformation  WHERE Student.Id = EnrollmentInformation.Id) |
| b. | UPDATE Student  SET Addr = (SELECT Address FROM EnrollmentInformation  WHERE Student.Id = EnrollmentInformation.Id) |
| c. | UPDATE Student  SET Address = (SELECT Addr FROM EnrollmentInformation) |
| d. | None of the others |
| e. |  |
| f. |  |
| Answer: | a |
| Mark: |  |
| Unit: | 6 |
| Mix choices: | Yes |

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| QN=24 | Which statement is used to insert data from table HREmp to table Employee: |
| a. | INSERT INTO Employee  SELECT \* FROM HREmp |
| b. | INSERT INTO Employee  VALUES(SELECT \* FROM HREmp) |
| c. | INSERT INTO Employee (Dept)  VALUES(‘HREmp) |
| d. | None of the others |
| e. |  |
| f. |  |
| Answer: | a |
| Mark: |  |
| Unit: | 6 |
| Mix choices: | Yes |

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| --- | --- |
| QN=25 | Which statement is used to delete all the data but keep the structure of table Student |
| a. | DELETE FROM Student |
| b. | DELETE TABLE Student |
| c. | DROP TABLE Student |
| d. | None of the others |
| e. |  |
| f. |  |
| Answer: | a |
| Mark: |  |
| Unit: | 6 |
| Mix choices: | Yes |

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| QN=26 | What type of join is needed when you wish to include rows that do not have matching values? |
| a. | Equi-join |
| b. | Natural join |
| c. | Outer join |
| d. | All of the others |
| e. |  |
| f. |  |
| Answer: | c |
| Mark: |  |
| Unit: | 6 |
| Mix choices: | Yes |

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| QN=27 | Give the query:  SELECT E.\*  FROM dbo.tblEmployee E, dbo.tblDepartment D  WHERE E.depNum = D.depNum  AND depName LIKE N'Phòng phần mềm trong nước'  Which query below is equivalent to this one? |
| a. | SELECT E.\*  FROM dbo.tblEmployee E JOIN dbo.tblDepartment D  ON E.depNum = D.depNum  AND depName LIKE N'Phòng phần mềm trong nước' |
| b. | SELECT \*  FROM dbo.tblEmployee  WHERE depnum IN  (SELECT depnum  FROM dbo.tblDepartment  WHERE depName LIKE N'Phòng phần mềm trong nước') |
| c. | SELECT \*  FROM dbo.tblEmployee  WHERE depnum =  (SELECT depnum  FROM dbo.tblDepartment  WHERE depName LIKE N'Phòng phần mềm trong nước') |
| d. | All of the others |
| e. |  |
| f. |  |
| Answer: | d |
| Mark: |  |
| Unit: | 6 |
| Mix choices: | Yes |

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| QN=28 | Which of the following should be used to find all the courses taught in the Fall 2014 semester but not in the Spring 2015 semester |
| a. | SELECT DISTINCT courseid FROM section WHERE semester = ’Fall’ and year= 2014 and  Courseid not in (SELECT courseid FROM section  WHERE semester = ’Spring’ and year= 2015); |
| b. | SELECT distinct course\_id FROM instructor WHERE name NOT IN (’Fall’, ’Spring’); |
| c. | (SELECT course id FROM section WHERE semester = ’Spring’ and year= 2015) |
| d. | SELECT distinct course\_id FROM instructor WHERE name = ’Fall’ OR name= ’Spring’; |
| e. |  |
| f. |  |
| Answer: | a |
| Mark: |  |
| Unit: | 6 |
| Mix choices: | Yes |

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| --- | --- |
| QN=29 | Give the SQL statement:  SELECT \* FROM Worker WHERE first\_name like '%a%' |
| a. | This statement is used to print details of the workers whose first\_name contains ‘a’ |
| b. | This statement is used to print details of the workers whose first\_name ends with ‘a’ |
| c. | This statement is used to print details of the workers whose first\_name begins with ‘a’ |
| d. | This statement is used to print details of the workers whose first\_name begins and ends with ‘a’ |
| e. |  |
| f. |  |
| Answer: | a |
| Mark: |  |
| Unit: | 6 |
| Mix choices: | Yes |

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| QN=30 | Which operator(s)are used in the SELECT statement? |
| a. | Expression |
| b. | Operator |
| c. | Aggregate functions |
| d. | All of these answers |
| e. |  |
| f. |  |
| Answer: | d |
| Mark: |  |
| Unit: | 6 |
| Mix choices: | Yes |

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| QN=31 | To display the unique values of a column, which word is used? |
| a. | Top |
| b. | Distinct |
| c. | All |
| d. | From |
| e. |  |
| f. |  |
| Answer: | b |
| Mark: |  |
| Unit: | 6 |
| Mix choices: | Yes |

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| --- | --- |
| QN=32 | Which statement does not fire the trigger? |
| a. | INSERT |
| b. | UPDATE |
| c. | DELETE |
| d. | SELECT |
| e. |  |
| f. |  |
| Answer: | d |
| Mark: |  |
| Unit: | 7 |
| Mix choices: | Yes |

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| --- | --- |
| QN=33 | How to declare a variable *idStudent* with *int* type in trigger? |
| a. | Declare @idStudent int; |
| b. | Int idStudent; |
| c. | Var idStudent int; |
| d. | None of the others |
| e. |  |
| f. |  |
| Answer: | a |
| Mark: |  |
| Unit: | 8 |
| Mix choices: | Yes |

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| --- | --- |
| QN=34 | The CREATE TRIGGER statement is used to create the trigger. 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, UPDATE |
| b. | ON, FOR INSERT |
| c. | FOR, INSERT |
| d. | FOR INSERT, ON |
| e. |  |
| f. |  |
| Answer: | b |
| Mark: |  |
| Unit: | 8 |
| Mix choices: | Yes |

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| --- | --- |
| QN=35 | Which of the following creates a virtual relation for storing the data ? |
| a. | Function |
| b. | View |
| c. | Procedure |
| d. | All of the others |
| e. |  |
| f. |  |
| Answer: | b |
| Mark: |  |
| Unit: | 8 |
| Mix choices: | Yes |
| QN=36 | Which of the following is used at the end of the view to reject the tuples which do not satisfy the condition in the WHERE clause ? |
| a. | With |
| b. | Check |
| c. | With check |
| d. | None of the others |
| e. |  |
| f. |  |
| Answer: | c |
| Mark: |  |
| Unit: | 8 |
| Mix choices: | Yes |

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| --- | --- |
| QN=37 | What is a benefit of stored procedure in SQL Server? |
| a. | Network efficiency |
| b. | Encapsulate business logic |
| c. | Maintainable |
| d. | Stronger security |
| e. | All of the others |
| f. |  |
| Answer: | e |
| Mark: |  |
| Unit: | 8 |

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| --- | --- |
| QN=38 | CREATE PROCEDURE dbo.uspGetAddress @City nvarchar(30)  AS  SELECT \*  FROM Person.Address  WHERE City = @City  GO;  @City is: |
| a. | An input parameter |
| b. | An output parameter |
| c. | Not a parameter |
| d. | None of the others |
| e. |  |
| f. |  |
| Answer: | a |
| Mark: |  |
| Unit: | 8 |
| Mix choices: | Yes |

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| --- | --- |
| QN=39 | Which keyword is used to create a variable in a stored procedure? |
| a. | UPDATE |
| b. | DECLARE |
| c. | SET NOCOUNT |
| d. | CREATE |
| e. |  |
| f. |  |
| Answer: | b |
| Mark: |  |
| Unit: | 8 |
| Mix choices: | Yes |

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| --- | --- |
| QN=40 | Which statement is used to drop multiple stored procedure? |
| a. | DROP PROC dbo.uspGetAddress, dbo.uspInsertAddress, dbo.uspDeleteAddress |
| b. | DROP PROCEDURE dbo.uspGetAddress, dbo.uspInsertAddress, dbo.uspDeleteAddress |
| c. | All of the answers |
| d. |  |
| e. |  |
| f. |  |
| Answer: | c |
| Mark: |  |
| Unit: | 8 |
| Mix choices: | Yes |