**Đề thi lý thuyết 1 môn RDBMS**

22 Jun

1-  
Which of the following statements with reference to Partitioned View is/are NOT TRUE?  
[A]  
A partitioned view can refer to a particular member table only once in its definition.  
———-  
[B]  
A partitioned view can have only member tables whose indexes are created on computed columns.  
———-  
[C]  
Member tables must have all Primary Key constraints on an identical number of columns  
———-

2  
A Trigger cannot be fired with the \_\_\_\_ SQL command.  
[A]  
delete  
———-  
[B]  
drop  
———-  
[C]  
update  
———-  
[D]  
insert  
———-  
3  
While using the CONVERT function, values that are too long for their data type are truncated.  
[A]  
True  
———-  
[B]  
False  
———-  
4  
Unions combine columns from multiple data tables.  
[A]  
True  
———-  
[B]  
False  
———-  
5  
Entity integrity is enforced by unique indexes because a unique value exists in each column  
[A]  
True  
———-  
[B]  
False  
———-  
6  
The TYPE\_WARNING attribute specifies a warning message to be sent to the client, if the cursor is implicitly converted from the requested type to another type.  
[A]  
True  
———-  
[B]  
False  
———-  
7  
The process of refining a database design to ensure data consistency and reduce duplication is known as \_\_\_\_\_\_\_\_\_\_\_.  
[A]  
Normalization  
———-  
[B]  
Data Modeling  
———-  
[C]  
Data Optimizing  
———-  
8  
\_\_\_\_\_ command is used in Database management system to fetch the common records from two tables.  
[A]  
Difference  
———-  
[B]  
Intersect  
———-  
[C]  
Union  
———-  
[D]  
Join  
———-  
9  
A stored procedure is a group of T-SQL statements compiled into a single execution plan. (T-F)  
10  
Both clustered and non-clustered indexes can be unique. (T-F)  
11  
Is it possible to decrypt the encrypted triggers? (Y-N)  
12  
Which of these statements are correct with respect to UNION? (Choose all that apply)  
[A]  
UNION columns of each table in the select statement should have the same data type  
———-  
[B]  
All the select statements should have the same number of rows.  
———-  
[C]  
Column name of each Select statement can be different  
———-  
[D]  
UNIONS can be used to limit the number of rows displayed  
———-  
13  
The global variable @error stores the error number in SQL Server.(T-F)  
14  
When any transaction in the chain of implicit transactions fails, the entire chain is aborted.(T-F)  
15  
The \_\_\_\_\_\_\_\_\_\_\_ functions are used to return the SQL Server settings  
[A]  
System  
———-  
[B]  
Server  
———-  
[C]  
User-defined  
———-  
[D]  
SQLServer  
———-  
16  
The \_\_\_\_\_\_\_\_\_\_\_\_\_ global variable returns the number of qualifying rows that are present in the currently open cursor.  
[A]  
@@FETCH\_STATUS  
———-  
[B]  
@@CURSOR\_STATUS  
———-  
[C]  
@@FETCH\_ROWS  
———-  
[D]  
@@CURSOR\_ROWS  
———-  
17  
Emp\_code in an employee table is \_\_\_\_\_\_\_ in an ER diagram.  
[A]  
an entityset  
———-  
[B]  
an entity  
———-  
[C]  
an attribute  
———-  
[D]  
an attributeset  
———-  
18  
Only the owner of the table can create indexes on the table.(T-F)  
19  
You have to define a database to control projects and reports at your college. Each student works with a project team which produces a project report. Identify the relationship between the Student and the Project?  
[A]  
One-to-One  
———-  
[B]  
Many-to-Many  
———-  
[C]  
One-to-Many  
———-  
[D]  
Many-to-One  
———-  
20  
The “Full-Text Search” feature of SQL Server helps you search for \_\_\_\_\_\_\_\_ data.  
[A]  
numeric  
———-  
[B]  
character  
———-  
[C]  
alphanumeric  
———-

21  
Which of the following statements with reference to Triggers is/are TRUE? (Choose all that apply)  
[A]  
A trigger applies to a single table  
———-  
[B]  
You cannot decrypt an encrypted trigger  
———-  
[C]  
A trigger can apply to many tables  
———-  
[D]  
You can only create a trigger in the current database  
———-  
22  
Which of the following is executed automatically?  
[A]  
Function  
———-  
[B]  
Anonymous PL/SQL block  
———-  
[C]  
Procedure  
———-  
[D]  
Trigger  
———-  
23  
The \_\_\_\_\_\_\_\_\_\_\_ statement is used to exit from a WHILE block.  
[A]  
Break  
———-  
[B]  
End  
———-  
[C]  
Exit  
———-  
[D]  
Terminate  
———-  
24  
Identify the correct SQL statement to delete the View “Airlines”  
[A]  
DROP VIEW Airlines  
———-  
[B]  
DELETE VIEW Airlines  
———-  
[C]  
REMOVE VIEW Airlines  
———-

25  
In a \_\_\_\_\_\_\_\_\_\_ index, the logical order of the index does not match the physical, stored order of the rows on disk.  
[A]  
Clustered  
———-  
[B]  
Non-clustered  
———-  
26  
Which of the following statements with respect to Clustered indexes is/are TRUE?  
[A]  
A clustered index determines the storage order of data in a table.  
———-  
[B]  
A clustered-index only specifies a logical ordering  
———-  
27  
Identify the SELECT statement which returns all the ‘Names’ in the Accounts table containing the alphabet ‘e’, but not as the first letter.  
[A]  
SELECT Name FROM Accounts WHERE Name LIKE ‘%e’  
———-  
[B]  
SELECT \* FROM Accounts WHERE Names LIKE ‘e’  
———-  
[C]  
SELECT \* FROM Accounts WHERE Name LIKE ‘&e’  
———-  
[D]  
SELECT \* FROM Accounts WHERE Name LIKE ‘%e%’  
———-  
[E]  
SELECT Name FROM Accounts WHERE Name LIKE ‘[^e]%e%’  
———-  
28  
Which type of lock ensures that multiple updates cannot be made to the same resource simultaneously?  
[A]  
Optimistic Lock  
———-  
[B]  
Exclusive Locks  
———-  
[C]  
Update Locks  
———-  
29  
You need to enable nested triggers to execute the cascade update and delete functions.  
30  
Identify the correct statement/s.

Statement 1: While building indexes on views, the view can only be based on tables, and cannot reference any views.

Statement 2: The objects referenced in the view must be in the same database as the view.  
[A]  
Both the Statements are true  
———-  
[B]  
Statement 1 is true  
———-  
[C]  
Statement 2 is true  
———-  
[D]  
Both the Statements are false  
———-  
31  
\_\_\_\_\_\_\_\_\_ combine rows from multiple data tables.  
[A]  
Unions  
———-  
[B]  
Subqueries  
———-  
32  
Following are the types of transactions in SQL Server 2000. (Choose all that apply)  
[A]  
Implicit transaction  
———-  
[B]  
Explicit transaction  
———-  
[C]  
Autocommit transaction  
———-  
[D]  
Rollback transaction  
———-  
33  
Which of the following is present in the oval symbol in an ERD?  
[A]  
Entity  
———-  
[B]  
Process  
———-  
[C]  
Attribute  
———-  
[D]  
Data store  
———-  
34  
In a Library Management system, there is a Librarian and many students. In an ERD, what type of relationship would you depict between them?  
35  
What is an index created on two or more columns called?[A]  
composite  
———-  
[B]  
non clustered  
———-  
[C]  
clustered  
———-  
[D]  
mixed  
———-  
36  
The nested subquery needs to be re-evaluated for every iteration of the parent query.(T-F)  
37  
We can use a subquery as a replacement for a value in the SELECT clause, as a part of WHERE clause. (T-F)  
38  
Once the table definition has been approved by the end user , the database designer can draw the ERD for the tables (T-F)  
39  
SQL Server automatically starts explicit transactions.(T-F)  
40  
Many subqueries can be re-written with \_\_\_\_\_\_\_\_\_.  
[A]  
Unions  
———-  
[B]  
Joins  
———-  
41  
When you attach an INSTEAD OF trigger to a table, it overrides the default action of the triggering statement.(T-F)  
42  
\_\_\_\_\_\_\_\_\_ procedures allow you to dynamically restore and execute a function within a DLL.  
[A]  
System  
———-  
[B]  
Cursor  
———-  
[C]  
Security  
———-  
[D]  
Extended  
———-  
43  
Partitioned tables are preferable over partition views in most operational environments.  
[A]  
False  
———-  
[B]  
True  
———-  
[C]  
TRUE: Only when the base tables are empty  
———-

44  
What do you understand by database design?  
[A]  
The formal process of analyzing facts about the real world into a structured database model.  
———-  
[B]  
A design sub activity involving the design of the conceptual, logical, and physical structure of one or more databases.

———-  
[C]  
The process of planning and structuring data objects along with the relationships among them (if any) within a database  
———-  
[D]  
All of the others  
———-  
45  
In SQL Server 2000, you can embed a stored procedure in the template and execute it without displaying its name in the URL.(T F)  
46  
Statement 1: Indexed view is supported by SQL Server Enterprise Edition.  
Statement 2: Indexed views improve the performance of complex queries.  
[A]  
Both the statements are true  
———-  
[B]  
Only Statement 1 is true  
———-  
[C]  
Only Statement 2 is true  
———-  
[D]  
Both the statements are false  
———-  
47  
You can use the \_\_\_\_\_\_\_\_\_\_ statement to modify a view.  
[A]  
MODIFY  
———-  
[B]  
ALTER  
———-  
[C]  
CHANGE  
———-  
48  
By default, only the owner of the database has the permission to create a trigger. This permission is transferable.  
[A]  
True  
———-  
[B]  
False  
———-  
49  
Which one of the followings system stored procedure will you use to display a list of triggers in the current database?  
[A]  
sp\_helptrigger  
———-  
[B]  
sp\_help  
———-  
[C]  
sp\_configure  
———-  
50  
\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the process of removing the redundancies form the incoming data.  
[A]  
Normalization  
———-  
[B]  
Referential Integrity  
———-  
[C]  
Creating Constraints  
———-  
51  
Views help to filter data as well as restrict data access.(T\_F)  
52  
State the output of FLOOR(66.5)  
[A]  
1  
———-  
[B]  
66  
———-  
[C]  
67  
———-  
[D]  
-1  
———-  
53  
Which of the following describes a SQL Server batch? (Choose all that apply)  
[A]  
Compiled into a single unit.  
———-  
[B]  
Executed in a single transaction.  
———-  
[C]  
Executed as individual statements.  
———-  
[D]  
Compiled as individual statements.  
———-  
[E]  
Executed as a single unit.  
———-  
[F]  
A group of SQL statements.  
———-  
54  
State the output of POWER(6, 2)  
[A]  
36  
———-  
[B]  
3  
———-  
[C]  
12  
———-  
[D]  
4  
———-  
55  
Once the transaction is committed, it cannot be rolled back.(T-F)  
56  
The SELECT statement can be used to populate the result of a query into another table.(T -F)  
57  
One of the drawbacks of Normalization is that the CPU time required to resolve complex join queries is very high.(T -F)  
58  
Views are dropped when corresponding table/s is/are dropped.(T -F)  
59  
An \_\_\_\_\_\_\_\_\_\_\_ transaction defines the start as well as the end of a transaction.  
[A]  
Explicit  
———-  
[B]  
Implicit  
———-  
[C]  
Autocommit  
———-  
60  
The TEXTPTR() function returns the result in the \_\_\_\_\_\_\_\_ format.  
[A]  
varbinary  
———-  
[B]  
binary  
———-  
[C]  
image  
———-  
61  
In stored procedures, the default return code value is \_\_\_\_\_\_\_\_, which indicates successful execution of the stored procedure  
[A]  
Yes  
———-  
[B]  
True  
———-  
[C]  
1  
———-  
[D]  
0  
———-  
62  
There is a table Student, which has a field studentname containing names of students. Identify the wildcard used to retrieve names of students, which don’t start within the range of e-g.  
[A]  
[e-g]%  
———-  
[B]  
[^e-g]%  
———-  
[C]  
[e^g]%  
———-  
[D]  
[efg]%  
———-  
[E]  
[^efg]%  
———-  
63  
What is the return type of the query given below?  
SELECT SIGN(0)  
[A]  
1  
———-  
[B]  
0  
———-  
[C]  
-1  
———-  
64  
The \_\_\_\_\_\_\_ function in SQL Server returns the current date.  
[A]  
now()  
———-  
[B]  
getdate()  
———-  
[C]  
date()  
———-  
[D]  
currentdate()  
———-  
65  
The \_\_\_\_\_\_\_\_\_\_ option prevents the user from viewing the text of the trigger.  
[A]  
WITH ENCRYPTION  
———-  
[B]  
WITH CIPHERTEXT  
———-  
[C]  
WITH SECURITY  
———-  
[D]  
WITH UNICODE  
———-  
66  
Only the System Administrator can enable or disable nested triggers. (T-F)  
67  
Which property ensures that all the transactions have been completed successfully?  
[A]  
Consistent  
———-  
[B]  
Atomicity  
———-  
[C]  
Isolated  
———-  
[D]  
Durable  
———-  
68  
Primary Key constraint creates clustered indexes automatically, if a clustered index does not exist on the table(T-F)  
69  
In the syntax given below,  
SET DEADLOCK\_PRIORITY { LOW | NORMAL | @deadlock\_var }  
@deadlock\_var is a character variable which specifies :  
[A]  
The deadlock-handling method  
———-  
[B]  
The session is returned to the default deadlock-handling method  
———-  
[C]  
A deadlock situation  
———-  
[D]  
None of the above  
———-  
70  
What is the return type of a stored procedure in SQL Server 2000?  
[A]  
Character  
———-  
[B]  
Integer  
———-  
[C]  
Boolean  
———-  
71  
You can use the \_\_\_\_\_\_\_\_\_\_ system stored procedure to enable or disable the nesting of triggers.  
[A]  
sp\_configure  
———-  
[B]  
sp\_trigger  
———-  
[C]  
sp\_start\_job  
———-  
[D]  
sp\_help  
———-  
72  
State the result of the following FETCH statement, if the cursor is just opened.

FETCH ABSOLUTE -3 From Airlinescursor.  
[A]  
It will fetch the 3rd row in the cursor.  
———-  
[B]  
It will fetch the 3rd row from the previously fetched row  
———-  
[C]  
It will fetch the 3rd row before the last row in the cursor.  
———-  
[D]  
It will fetch the 3rd row before the previously fetched row  
———-  
73  
In an ERD, \_\_\_\_\_\_\_\_ is a person, place, thing, object, event or even a concept that can be distinctly identified.  
[A]  
Attribute  
———-  
[B]  
Entity  
———-  
[C]  
Relationship  
———-

THỰC HÀNH

Q.1 Create a database named Personnel. 1.0   
Q.2 Create the following tables as per the given structure. 2.0   
Fields Constraints Datatype  
Dept\_Id Primary key Interger  
Dept\_Name Not Null Character  
Function Not Null Character  
Location Receive only values: Hyderabad, Character  
Bangalore, Numbai

Fields Constraints Datatype  
Emp\_Id primary key Interger  
Emp\_Name Not Null Character  
Dept\_Id Foreign key Interger  
Salary Not Null Interger  
Address Varchar  
Phone Interger  
Q.3 Insert the following data into the tables 2.0 [Giải]  
Employee  
Emp\_Id Emp\_Name Dept\_Id Salary Address Phone  
1 Shane 1 2000 California 4532145  
2 Michael 3 5000 New york 6949434  
3 Sam 1 2500 Washington 4445343  
4 Clarke 2 4000 California 5675433  
5 Monica 2 2000 Pentagon 3344434  
6 Thomas 3 5500 California 3433322  
7 James 1 2500 New York 2432243  
8 Marry 1 4000 Pentagon 3422443  
9 Strauss 2 2500 New Jersey 3342344  
10 Stewart 3 4000 Washington 2333232  
  
Q.4 Display the Emp\_Id,Emp\_Name,Dept\_Id,Phone of the Employee with Emp\_Name contains 'ch' or 'tr' 2.0 [Giải]  
Q.5 Increase by 10% the Salary of the employees whom are from 'California' [Giải]  
Q.6 Display the total employee group by address 2.0 [Giải]  
Q.7 Display the average salary 1.0 [Giải]  
Q8 Display the total money that the company has to pay every month 1.0 [Giải]  
Q9 Display the details of the departments which locate in Bangalore. 1.0 [Giải]  
Q10 Display all the employees who live in California an belong to department 1 [Giải]  
Q11 Display total money per month that the company has to pay to the employees who live in Pentagon 2.0 [Giải]  
Q12 Display all employees in descending order of salary 1.0 [Giải]  
Q13 Display 3 first employees that have biggest salary 2.0 [Giải]  
Q14 Display the details of employee who has a phone numberic including 333 [Giải]  
Q15 Get Emp\_Id,Emp\_Name,Dept\_Name,Location of all employees that have salary above 3000. 2.0 [Giải]

### **ĐỀ THI THỰC HÀNH SQL**

Perform the following tasks in the SQL Query Analyzer and save commands in directory D:\<Your Name>\ with file named ExamSQL.sql

|  |  |  |
| --- | --- | --- |
| 1. | Create a database named  SalesManagement with data file and log file are saved in C driver. The size of data file and log file are 3MB, and the maximum size of them are 5MB. | [5] |
| 2. | Create the following tables in the database SalesManagement applying the specified integrity constraints. | [5] |

|  |  |  |
| --- | --- | --- |
| Table: Customers | | |
| Column Name | DataType | Description |
| CustomerID | VARCHAR(5) | Customer ID - Primary Key |
| CustomerName | VARCHAR (30) | Customer Name |
| Address | VARCHAR(50) | Customer Address |
| City | VARCHAR(20) | Customer City |
| Phone | VARCHAR(10) | Customer Telephone |

|  |  |  |
| --- | --- | --- |
| Table: Products | | |
| Column Name | DataType | Description |
| ProductID | INTEGER | Product ID - Identity (1,1) - Primary Key |
| ProductName | VARCHAR(50) | Product Name |
| Price | MONEY | Product Price |

|  |  |  |
| --- | --- | --- |
| Table: Orders | | |
| Column Name | DataType | Description |
| OrderID | INTEGER | Order ID - Identity (1,1)  - Primary Key |
| CustomerID | VARCHAR(5) | Customer ID |
| OrderDate | DATETIME | Order Date |
| RequiredDate | DATETIME | Order Required Date |

|  |  |  |
| --- | --- | --- |
| Table: OrderDetails | | |
| Column Name | Data Type | Description |
| OrderID | INTEGER | Order ID – Primary Key |
| ProductID | INTEGER | Product ID – Primary Key |
| Quantity | SMALLINT | Quantity Of Order |

|  |  |  |
| --- | --- | --- |
| 3. | Establish the relationships among the tables | [10] |
| 4. | Insert the following data into the above tables | [6] |

Customers table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CustomerID | CustomerName | Address | City | Phone |
| A0001 | Ronaldo | 12 Glassgow | London | 002-342561 |
| A0002 | David Beckham | Cerrito 333 | Florida | 001-281212 |
| B0001 | Van Persie | 35 King George | London | 002-214567 |
| B0002 | Bebetov | 722 DaVinci | Florida | 001-221122 |
| C0001 | Raul Gonzalez | 12 Orchestra | Milan | 003-234876 |
| C0002 | Carlos Tevez | 300 Queensbridge | London | 002-879011 |
| D0001 | Kaka | Gran Via, 1 | Milan | 003-211781 |
| D0002 | Thiery Henry | Magazinweg 7 | Barcelona | 004-982323 |

Products table

|  |  |  |
| --- | --- | --- |
| ProductID | ProductName | Price |
| 1 | Chocolate | 21 |
| 2 | Camembert Pierrot | 22.5 |
| 3 | Filo Mix | 7 |
| 4 | Zaanse koeken | 9.75 |
| 5 | Gula Malacca | 12.45 |
| 6 | Maxilaku | 20 |
| 7 | Steeleye Stout | 18 |
| 8 | Geitost | 3.75 |

Orders table

|  |  |  |  |
| --- | --- | --- | --- |
| OrderID | CustomerID | OrderDate | RequiredDate |
| 1 | A0001 | 9/13/2006 | 9/25/2006 |
| 2 | D0002 | 7/30/2007 | 8/20/2007 |
| 3 | B0001 | 11/11/2007 | 11/25/2007 |
| 4 | B0001 | 2/20/2008 | 3/10/2008 |
| 5 | C0002 | 5/12/2008 | 5/27/2008 |

OrderDetails table

|  |  |  |
| --- | --- | --- |
| OrderID | ProductID | Quantity |
| 1 | 1 | 12 |
| 1 | 2 | 7 |
| 2 | 6 | 30 |
| 3 | 7 | 22 |
| 3 | 1 | 15 |
| 4 | 4 | 55 |
| 4 | 3 | 11 |
| 4 | 5 | 10 |
| 5 | 6 | 120 |
| 5 | 2 | 13 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 4. |  |  | | |
| a) | Display the information of all customers | [5] | | |
| b) | Display the customers who live in London. The displayed information include: Customer ID, Customer Name, Address, Phone. The list is ordered by Customer Name | [5] | | |
| c) | Display the number of customers of each city. The displayed information include: Name of City, Number of Customers | [5] | | |
| d) | Display the name of customers who have at least an order | [5] | | |
| e) | Display the name of customers who have not any order | [5] | | |
| f) | Display the number of order for each customers. The displayed information include: Customer ID, Customer Name, Number of Orders | [5] | | |
| g) | Display the list of orders,  the sum quantity of each customer’s orders and the sum quantity of all orders. The displayed information include: Customer Name, Product Name, Order Date, Quantity, the Sum Quantity of each Customer’s Orders, the Sum Quantity of all Orders. | [6] | | |
| 5. | Create a view named View\_Order that contains the Customer Name, Address, Product Name, Order Date, Quantity. | | [5] | |
| 6. |  | | |  | |
| a) | Create a delete trigger named DelProducts on the Products table to avoid deleting on the Products table. | | | [5] | |
| b) | Create a trigger to verify that user can not modify the price of a Product with a value that greater than 150 or less than 3. | | | [6] | |
| 7. |  |  | | |
| a) | Create a clustered index IX\_ Customers for CustomerID in Customers | [7] | | |
| 8. |  |  | | |
| a) | Create a stored procedure named DisplayOrderDetail, which will display Customer Name, Address, Product Name, Order Date, Quantity by passing Customer ID as a parameter. In case the required Customer ID does not exist, display an appropriate message | [10] | | |
| b) | Write a statement to execute DisplayOrderDetail | [5] | | |

|  |
| --- |
| create database SalesManagement on  (  name='SalesManagement',  filename='C:\SalesManagement.mdf',  size=3,  maxsize=5  )  log on  (  name='SalesManagement\_log',  filename='C:\SalesManagement.ldf',  size=3,  maxsize=5  )  go |