CHAPTER 03 to 08

Chapter 03

1. Which of the following does not fall in DML?
   A. CREATE
   B. DELETE
   C. SELECT
   D. UPDATE

Answer: A

2. A _____indicates that we are merely reading information.
   A. SELECT
   B. INSERT
   C. COLUMN-LIST
   D. source table

Answer: A

3. Which one is domain listing?
   A. an exclusive list of choices
   B. a set of statements in sequence
   C. a set of condition to be met
   D. an ordered set of rules to follow

Answer: A

4. What does the WHERE clause in a SELECT statement do?
   A. it defines from which source the data come from
   B. it defines what conditions a record has to meet before it will be shown
   C. it defines how to format record before it will be shown
   D. it defines the destination where records will be saved

Answer: B

5. If you perform an AVG or other aggregate function on a column with NULLs, the NULL values _____ part of the aggregation.
   A. will be
   B. will not be

Answer: B

6. The _____ clause is used only if there is also a GROUP BY in your query
   A. WHERE
   B. FOR XML
   C. HAVING
   D. ORDER BY

Answer: C

7. Which one of the following is equivalent to the condition"age BETWEEN 18 AND 30?
   A. age > 18 AND age < 30
   B. age >= 18 AND age <= 30
   C. age >= 18 OR age <= 30
   D. age >= 19 AND age <= 29

Answer: B

8. EXISTS(SELECT 1 WHERE 1=1) will return ?
   A. TRUE
   B. FALSE

Answer: A

9. The ORDER BY clause can be based on any column in any table used in the query regardless of whether it is included in the SELECT list.
   A. True
   B. False

Answer: A

10. The _____ clause is used to aggregate information.
    A. GROUP BY
    B. HAVING
    C. ORDER BY
    D. WHERE

Answer: A

11. The COUNT, when used in any form other than COUNT(*), _____NULL values.
    A. ignores
    B. does not ignore

Answer: A

12. To view properties of a table which system stored procedure is used?
    A. sp_helpdb
    B. helptable
    C. sp_helpobject
    D. sp_help

Answer: D

13. In which situations you use the INSERT INTO . . . SELECT Statement?

A. to insert data into a table by selecting data from another table in the same database
B. to insert data into a table by selecting data from another table in a different database in the same server
C. to insert data into a table by selecting data from a heterogeneous query
D. to insert data into a table by selecting data from the same table

Answer: A, B, C, D

Q1. The _____ statement is the primary way of retrieving data from a database.
A. SELECT
B. CREATE
C. FETCH
D. GET DATA

Answer: A

Q2. Which character is used in a SELECT statement to denote all columns of a table instead of explicitly listing their names?
A. ?
B. A
C. *
D. #

Answer: C

Q3. We can explicitly list a few column names those we wish to return from a table by a SELECT statement. This is called _____.

Fill the blank with the correct option.
A. Vertical partitioning
B. Horizontal partitioning
C. Correlated query
D. Subquery

Answer: A [SELECT CustomerID, CompanyName, City FROM Customers – here we explicitly listed the column names to return. And we are blocking information in vertical axis. SEE PAGE 445 in book]

Q4. You ran the query, SELECT * FROM Customers. Find the true statement or statements about this.
A. This query will include all the columns in the Customers table
B. This query will return data in natural order
C. This will return data in ascending order.
D. This query will not run

Answer: A, B (natural order means the order in which data is stored in the table)

Q5. Consider the T-SQL query
SELECT * FROM Trainees
Now which statement or statements are true?
A. This statement will return data ordered by PRIMARY KEY FIELD
B. This statement will return data in the order in which data is stored in the table
C. This statement will return data ordered by the first column in the table
D. This statement will return data ordered by the last column in the table

Answer: B [SELECT query returns data in natural order if no order by clause is provided]

Q6. Which clause do we use to sort the returned data by a SELECT statement?
A. ORDER BY
B. ORDER
C. SORT BY
D. SORT

Answer: A

Q7. If you don't specify ASC or DESC with ORDER BY clause, in what order the data is returned?
A. ASCENDING order
B. DESCENDING order
C. NATURAL order
D. REVERSE order

Answer: A

Q8. Consider the following query
SELECT * FROM [Batches] ORDER BY [Start_Date]
Now which statement or statements are true?
A. This query will order the data by [Start_Date] in ascending order
B. This query will order the data by [Start_Date] in descending order
C. This query will fail, as it did not include ASC or DESC at the end
D. The query will return data in natural order

Answer: A [If ASC or DESC is not provider, ASC will be considered. ASC is default]

Q9. SELECT * FROM Customers ORDER BY CustomerID DESC, CotactName. Now find the true statement about the query.
A. The results are ordered by CustomerID column in reverse alphabetical order and then are ordered by the ContactName column in alphabetical order.
B. The results are ordered by ContactName column in reverse alphabetical order and then are ordered by the CustomerID column in alphabetical order.
C. The results are ordered by CustomerID column in reverse alphabetical order and then are ordered by the ContactName column in reverse alphabetical order.

D. The results are ordered by CustomerID column in alphabetical order and then are ordered by the ContactName column in alphabetical order.

Answer: A

Q10. Which of the following are not valid in the ORDER BY clause?

A. Text Column
B. Identity Column
C. Ntext Column
D. Image Column

Answer: A, C, D

Q11. To limit the rows that will be included in the result set, which clause do we use?

A. ORDER BY
B. LIMIT BY
C. WHERE
D. LIMIT

Answer: C

Q12. Which clause do we use in a SELECT statement to apply filter to the data that is being retrieved?

A. Group by
B. Order by
C. Limit by
D. Where

Answer: D

Q13. Which of the following operator can you use with WHERE clause?

A. =
B. >
C. <
D. !=
E. <>
F. LIKE

Answer: A, B, C, D, E, F

Q14. You want to view trainees living in Dhaka and Chitagong from Trainees table.
Which of the following will return this data? [Chose all valid options]

A. SELECT TraineeID, [Name] FROM Trainees Where City = 'Dhaka' AND City = 'Chittagong'
B. SELECT TraineeID, [Name] FROM Trainees Where City = 'Dhaka' OR City = 'Chittagong'
C. SELECT TraineeID, [Name] FROM Trainees Where City = 'Dhaka' OR 'Chittagong'
D. SELECT TraineeID, [Name] FROM Trainees Where City IN ('Dhaka', 'Chittagong')

Answer: B, D [A: Query will return nothing, it actually meaning that a trainee is living in Dhaka and Chittagong simultaneously C: Syntax is not correct]

Q15. In a select statement, you want to change the CustomerID column header to Customer Code without changing the column name in the underlying table. Find the valid ones.

A. CustomerID 'Customer Code'
B. CustomerID AS 'Customer Code'
C. 'Customer Code' = CustomerID
D. CustomerID = 'Customer Code'

Answer: A, B, C

Q16. How can you limit the number of rows returned by a query?

A. Setting rowcount by using syntax SET ROWCOUNT N, where N is the number of rows
B. Adding TOP Clause in the SELECT statement
C. Adding LIMIT clause in SELECT statement
D. None

Answer: A, B

Q17. A user executed the following SQL

SET ROWCOUNT 10

What will happen?

A. The user will be allowed only to run 10 queries during current session
B. The user can change only 10 rows in a table in the current session
C. All subsequent result sets will be limited to 10 rows until the session ends or SET ROWCOUNT 0 is issued
D. The user can hold a result set in memory in the current session

Answer: C [When you run SET ROWCOUNT N, all the queries will return maximum N number of rows. If the user disconnects or runs SET ROWCOUNT 0, the setting will be deactivated]

Q18. You want to view top three marks achiever in an admission test. Data is in ExamResult table and mark achieved by an examinee is stored in 'Marks_Obtained' column. Which query should you use?

A. SELECT TOP 3 * FROM Exam_Results ORDER BY Marks_Obtained DESC
B. TOP 3 SELECT * FROM Exam_Results ORDER BY Marks_Obtained DESC
C. SELECT TOP 3 * FROM Exam_Results ORDER BY Marks_Obtained ASC

D. TOP 3 SELECT * FROM Exam_Results ORDER BY Marks_Obtained ASC

Answer: A

[B, D – Syntax not correct
C – will retrieve lowest three marks achiever]

Q19. Which query or queries are correct?

A. SELECT TOP 10 OrderId, OrderDate FROM Orders
B. SELECT TOP 10% OrderId, OrderDate FROM Orders
C. SELECT TOP 10 PERCENT OrderId, OrderDate FROM Orders
D. SELECT 10% of OrderId, OrderDate FROM Orders

Answer: A, C [% is not allowed use PERCENT]

Q20. _____ provide a summary of information in a query.
Choose the appropriate option for the blank.

A. Aggregate operator
B. Group operator
C. Limit operator
D. Counting operator

Answer: A

Q21. What is the COUNT called in query like below?
SELECT COUNT(*) FROM Customers

A. Aggregate operator
B. Group operator
C. Limit operator
D. Counting operator

Answer: A

Q22. Whenever a non-aggregate function is included with aggregate field, what rule you must follow?

A. Add GROUP BY clause and list the non-aggregate field with it
B. Add GROUP BY clause and list the aggregate field with it
C. Add ORDER BY clause and list the non-aggregate field with it
D. None

Answer: A

Q23. Which query or queries will work?

A. Select Country, Count(CustomerId) AS 'No. of customers' FROM Customers
B. Select Country, Count(CustomerId) AS 'No. of customers' FROM Customers ORDER BY Country
C. Select Country, Count(CustomerId) AS 'No. of customers' FROM Customers GROUP BY Country
D. Select Country, Count(CustomerId) AS 'No. of customers' FROM Customers SORT BY Country

Answer: C

Q24. Which query or queries will work?

A. Select Country, Count(CustomerId) AS 'No. of customers' FROM Customers GROUP BY Country WHERE Country = 'Germany'
B. Select Country, Count(CustomerId) AS 'No. of customers' FROM Customers WHERE Country = 'Germany' GROUP BY Country
C. Select Country, Count(CustomerId) AS 'No. of customers' FROM Customers GROUP BY Country HAVING Country = 'Germany'
D. Select Country, Count(CustomerId) AS 'No. of customers' FROM Customers HAVING Country = 'Germany' GROUP BY Country

Answer: B, C [Having Clause is used with GROUP BY and it must be after GROUP BY clause. WHERE clause can be used but before GROUP BY]

Q25. You want to combine the resultset of two select statements into one result. What would you use?

A. Inner Join
B. Outer Join
C. Cross Join
D. Union

Answer: D

Q26. Consider the following expressions:
Expression1: IsDate('01-01-2006')
Expression2: IsDate('78-78-99')
What will be return value of the expressions?

A. Expression1 will return 1 and Expression2 will return 0
B. Expression1 will return 0 and Expression2 will return 1
C. Expression1 will return 1 and Expression2 will return 1
D. Expression1 will return 0 and Expression2 will return 0

Answer: A (First one true, second one false)

Q27. Consider the following code fragment

Declare @a int, @b int
Set @b = 8
Print IsNull(@a, @b)
What is the output?

A. 0
B. Null
C. 8
D. Error

Answer: C (@a is not set, so return value of @b. If @a is set then it would return value @a)
Q28. DateName(Month, '01-01-2005')
What is the output?

A. 01
B. 1
C. January
D. None

Answer: C

Q28. Consider the query
SELECT 1+1
Will it work?

A. Yes
B. No

Answer: A [Scalars; It will return 2. It will have 'no column name' as Column Header]

Q29. _____ is used inside another query.

A. An aggregate operator
B. A join
C. A subquery
D. A scalar

Answer: C

Q30. In a SELECT statement, where can you place a subquery?

A. In the SELECT list
B. In the FROM clause
C. In the WHERE Clause (mostly used)
D. In the ORDER By clause

Answer: A, B, C

Q31. SQL server 2012 cannot return data in XML format.
Is this statement true?

A. Yes
B. No

Answer: No [You use FOR XML clause to retrieve data in XML format. SQL 7 or lower versions do not have this ability]

Q32. Which is the most efficient way of retrieving data in xml format?

A. Accessing through IIS
B. Accessing data through URL
C. Accessing data through template
D. Using SELECT statement adding FOR XML clause

Answer: D
Q33. Which query will return the following data in XML Format?

```
<Books book_name="SQL" author="S. Jones" price="800.0000"/>
<Books book_name="C Sharp" author="J. Hunter" price="890.0000"/>
<Books book_name="UML" author="Ben" price="390.0000"/>
```

A. SELECT * FROM Books FOR XML AUTO
B. SELECT * FROM Books FOR XML RAW
C. SELECT * FROM Books FOR XMLDATA
D. SELECT * FROM Books FOR XML AUTO, ELEMENTS

Answer: A
Q34. Which query will return the following data?

```
<row book_name="SQL" author="S. Jones" price="800.0000"/>
<row book_name="C Sharp" author="J. Hunter" price="890.0000"/>
<row book_name="UML" author="Ben" price="390.0000"/>
<Books book_name="UML" author="Ben" price="390.0000"/>
```

A. SELECT * FROM Books FOR XML AUTO
B. SELECT * FROM Books FOR XML RAW
C. SELECT * FROM Books FOR XMLDATA
D. SELECT * FROM Books FOR XML AUTO, ELEMENTS

Answer: B

Q35. Which query or queries will work?

A. SELECT * FROM Trainees FOR XML AUTO, ELEMENTS
B. SELECT * FROM Trainees FOR XML RAW, ELEMENTS

C. SELECT * FROM Trainees FOR XML AUTO, XMLData
D. SELECT * FROM Trainees FOR XML RAW, XMLData

Answer: A, C, D [ELEMENTS option works with only AUTO mode]

Chapter 04

1. Which of the following is or are the purposes of normalization i.e., breaking out from larger tables into many smaller tables?
   A. eliminating repeating data
   B. saving space
   C. improving performance
   D. increasing data integrity

Answer: A, B, C, D

2. Will the following query run?

```
SELECT p.*, Suppliers.SupplierID
FROM Products p
INNER JOIN Suppliers s
ON p.SupplierID = s.SupplierID
```

   A. Yes
   B. No

Answer: B [Suppliers table is aliased, so Suppliers.SupplierID should be s.SupplierID]

3. Which type of JOIN excludes all records that don't have a value in both tables?
   A. INNER JOIN
   B. OUTER JOIN
   C. CROSS JOIN
   D. FULL JOIN

Answer: A

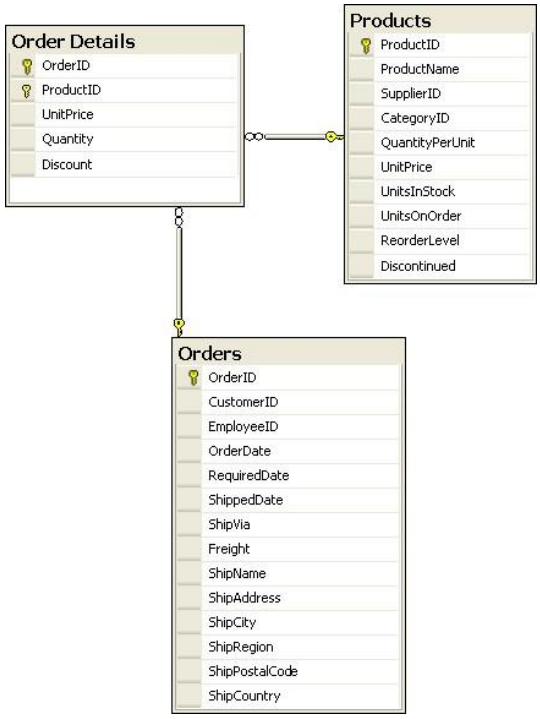
4. INNER JOIN is comparable to _____ clause.
   A. GROUP BY
   B. WHERE
   C. ORDER BY
   D. HAVING

Answer: B

5. Which operator is as concatenation of strings in T-SQL?
   A. &
   B. .
   C. +
   D. _

Answer: C

6. A database diagram is shown in the exhibit.
   Which one is an association table in the database diagram shown in the figure?



   A. Products
   B. Orders
   C. Order Details
   D. None

Answer: C

7. Which one is a linking table?
    A. A table for which the primary purpose is not to store its own data, but rather to relate the data stored in other tables.
    B. A table for which the primary purpose is not to store its own data, but rather to link two tables in two different databases.
    C. A horizontally partitioned table
    D. A table which is created by merging two smaller table

Answer: A

8. _____ returns the records which are satisfying the joining condition and also which are not satisfying the join condition.
    A. INNER JOIN
    B. OUTER JOIN
    C. CROSS JOIN
    D. None

Answer: B

9. Which type of join has no ON operator?
    A. INNER
    B. OUTER
    C. FULL
    D. CROSS

Answer: D

10. Which one combines two resultsets into single resultset?
    A. UNION
    B. JOIN
    C. INDEX
    D. Normalization

Answer: A

Q1. Why JOINs are used in SQL Statement?
    A. To combine two table into single schema for better maintenance
    B. To combine data from two tables into one result set
    C. To combine two different database into a single one
    D. All of the above.

Answer: B

Q2. ____ puts the information from two tables together into one result set.
Pick the correct one for the blank space?
    A. A UNION
    B. A JOIN
    C. An AGGREGATE
    D. A Stored Procedure

Answer: B

Q3. _____ JOIN returns only the records where there are matches for whatever field(s) you have said are to be used for the JOIN.
Pick the correct one for the blank space?
    A. An INNER JOIN
    B. An OUTER JOIN
    C. A CROSS JOIN
    D. A FULL OUTER JOIN

Answer: A

Q4. You the following Query

```
SELECT Products.*, SupplierID
FROM Products
INNER JOIN Suppliers
ON Products.SupplierID = Suppliers.SupplierID
```

Should the Query Work?
    A. Yes
    B. No

Answer: B [SupplerID is present in both Products and Suppliers table. You should use Products.SupplierID or Suppliers.SupplierID in column list]

Q5. _____ works by comparing columns in two tables and returning the requested information if the values match. Select the correct one for the blank.
    A. An inner join
    B. A outer join
    C. A cross join
    D. A self join

Answer: A

Q6. You want all rows from two related tables, matching the rows up whenever possible? Which type of join should you use?
    A. Left outer join
    B. Right outer join
    C. Full outer join

D. Inner join

Answer: C

Q7. _____ allow all rows from one or more tables to be included in the resultset. Select the correct one for the blank.

A. Inner joins
B. Outer joins
C. Cross joins
D. Distributed queries

Answer: B

Q8. You wrote the following query

```
SELECT TraineeID, TraineeName, ExamID, ExamDate, Marks
        FROM Trainees
        INNER JOIN Exams
        ON Trainees.TraineeID = Exams.TraineeID
```

Will this query work?

A. Yes
B. No

Answer: B

[You can clearly see that TraineeID is present in both Trainees and Exams table and you are selecting data from both the table. So, you must explicitly specify from which table the TraineeID to be shown.
You should write Trainees.TraineeID or Exams.TraineeID instead of only TraineeID]

Q9. Does SQL Server support FULL OUTER Joins?

A. Yes
B. No

Answer: A

[Yes, SQL Server does but MS Access does not]

Q10. A CROSS JOIN does not require an ON operator?
Is it true?

A. Yes
B. No

Answer: A

Q11. Which type of JOIN returns a Cartesian product of all the records on both sides of the JOIN?

A. INNER JOIN
B. OUTER JOIN
C. CROSS JOIN
D. SELF JOIN

Answer: C

Q12. Which one is an alternative of LEFT JOIN?

A. *=
B. =*
C. *=*
D. ==

Answer: A

Q13. Which one is an alternative of RIGHT OUTER JOIN?

A. *=
B. =*
C. *=*
D. ==

Answer: B

Q14. You have the following query

```
SELECT v.VendorName, a.Address
FROM Vendors v
CROSS JOIN Address a
```

Which one will return the same result set as the above?

A.
```
SELECT v.VendorName, a.Address
FROM Vendors v, Address a
```
B.
```
SELECT v.VendorName, a.Address
FROM Vendors v
SELF JOIN Address a
```
C.
```
SELECT v.VendorName, a.Address
FROM Vendors v
JOIN Address a
```
D.
```
SELECT v.VendorName, a.Address
FROM Vendors v
FULL OUTER JOIN Address a
```

Answer: A

Chapter 05

1. Consider the following statements
   Statement I: It is possible to have two objects with the same name, but residing in different schemas.
   Statement II: It is NOT possible to have two objects with the same name, but residing in different schemas.
   Which statement is valid?
   A. Statement I
   B. Statement II
   C. Both Statement I & II
   D. Neither

Answer: A

2. Which of the following Role members can create database?
   A. sysadmin
   B. db_owner
   C. db_ddladmin
   D. db_datawriter

Answer: A, B, C
[db_datawriter can VIEW ANY DATABASE and grated DELETE, INSERT, UPDATE rights]

3. Which table constraint allows a value to be used for any rows that are inserted without a user-supplied value for this particular column in the table?
   A. CHECK
   B. Nullability
   C. DEFAULT
   D. UNIQUE

Answer: C

4. The column whose value is derived on the fly from other columns in the table is known as_____ column.
   A. identity
   B. rowguidcol
   C. computed
   D. compound

Answer: C

Q5. A table is a set of _____.
   A. rows and columns
   B. datatypes and data
   C. field and values
   D. attributes and fields

Answer: A

Q6. During table creation, if you do not specify NULL or NOT NULL in a column – what will be the column's Nullabilty?
   A. It will allow null
   B. It will not allow null
   C. It will depend on ANSI NULL DEFAULT database option
   D. You can not create a table, without specifying a column's nullibility

Answer: C

Q7. Consider the column definition
   C1 int not null
What does not null indicate?
   A. C1 column is not part of the table
   B. A Value is not required for the column, you can leave it blank
   C. Value is required for the column
   D. Column definition is not valid

Answer: C

Q8. The value of which of the following columns are automatically generated?
   A. IDENTITY
   B. Datetime
   C. SmallDatetime
   D. ROWGUID

Answer: A, D

Q9. Which property in SQL Server you should use to auto-numbering value in a column?
   A. autonumber
   B. autoincrement
   C. auto
   D. identity

Answer: D

Q10. If you delete a row, the value in identity column can be reused by the system.
   A. true
   B. false

Answer: B [Unless you set IDENTITY INSERT option for the table to ON]

Q9. Consider the following T-SQL statement

```
Create Table T1
(
        Sid int identity(10, 10) not null,
        Sname varchar(100)
)
```

The first inserted row of the table will have value _____ in Sid Column.

A. 1
B. 10
C. System generated value
D. None

Answer: B

Q10. If you want to insert explicit value in identity column, what should you do?

A. Remove identity property from the column
B. Turn off t auto numbering option in the database
C. Turn on ident_current
D. Turn on identity_insert

Answer: D

Q11. You have a table which a column named CourseID and the column defined as identity. You have inserted a series of rows and after a while you deleted a certain row but you want to reuse the CourseID value of that row. How can you do that?

A. Just explicitly insert the deleted CourseID value in the new row
B. Drop the table recreate it and insert the rows
C. Set IDENTITY_INSERT on and then use explicit insert
D. None of the above

Answer: C

Q12. Which of the following can help you to find last identity value inserted by the system?

A. @@INDENTITY global variable
B. IDENT_CURRENT function
C. SCOPE_IDENTITY function
D. GLOBAL_IDENTITY function

Answer: A, B, C

Q13. A table can have _____ identity column.

A. Only one
B. Two
C. Alt least one
D. Any number of

Answer: A

Q14. To set identity property, which of the following datatype or datatypes can be used?

A. TINYINT
B. Numeric(p, 0)
C. Decimal(p, 0)
D. Decimal(p, n)

Answer: A, B, C [all integers TINYINT, SMALLINT, INT, BIGINT can be used, you can use decimal, numeric but decimal place must be 0, like Decimal(5, 0) . but decimal(5, 2) can not be used]

Q15. A GUID is a _____ number.

A. 128 bit
B. 64 bit
C. 32 bit
D. 16 bit

Answer: A

Q16. You want to create a table that has a column name ProdTag. The ProdTag should be globally unique and it should be generated by the system. Which of the following SQLs should you use?

A.
```
Create Table Products
( ProdID int not null primary key,
  ProdTag uniqeidentifier rowguidcol not null
)
```
B.
```
Create Table Products
( ProdID int not null primary key,
  ProdTag unique rowguidcol not null default newid()
)
```
C.
```
Create Table Products
( ProdID int not null primary key,
  ProdTag uniqeidentifier not null
)
```
D.
```
Create Table Products
( ProdID int not null primary key,
```

ProdTag uniqeidentifier rowguidcol not null default newid()

)
Answer: D [uniqeidentifier and rowguidcol both should be used]

Q17. You want to create the table T1 on fg2 filegroup. Which of the following is the correct SQL?
A. Create table T1 on fg2
(c1 int not null, c2 char(20 not null)
B. Create table T1 on filegroup fg2
(c1 int not null, c2 char(20 not null)
C. Create table T1
(c1 int not null, c2 char(20 not null) on fg2
D. Create table T1
(c1 int not null, c2 char(20 not null) on fg2
Answer: D

Q18. Which of the fllowing statement or statements are correct?
A. Create Table Products
(ProdID int not null primary key,
ProdTag uniqeidentifier rowguidcol not null
) on Primary
B. Create Table Products
(ProdID int not null primary key,
ProdTag uniqeidentifier rowguidcol not null
) On [primary]
C. Create Table Products
(ProdID int not null primary key,
ProdTag uniqeidentifier rowguidcol not null
) on filegroup [primary]
D. None
Answer: B [primary is keyword, should enclose it with [], like [primary]]

Q19. Which of the following datatype or Datatypes in an existing column can not be altered?
A. TEXT
B. ROWGUIDCOL
C. IDENTITY
D. TIMESTAMP
Answer: A, B, D

Q20. You created a table using following SQL
CREATE TABLE T1
(
C1 int,
C2 varchar(50)
)
Now which of the following ALTER statement or statements will work?
A. ALTER TABLE T1 ALTER COLUMN C1 SAMALLINT
B. ALTER TABLE T1 ALTER COLUMN C1 CHAR(10)
C. ALTER TABLE T1 ATER COLUMN C2 INT
D. ALTER TABLE T1 ATER COLUMN C2 VARCHAR(25)
Answer: B, D (new datatype must be convertible implicitly, CHAR to INT OR vice versa won't work)

Q21. You want to alter a column's datatype from int to smallint. Is it possible?
A. No
B. Yes
C. Possible, if no data is lost
D. You can not go to narrower datatype
Answer: C

Q22. You have a table named Students having 2000 rows of data. You want to add a column using the T-SQL
ALTER table students add alternate_contact varchar(150) not null
Will the sql work?
A. Yes
B. No
Answer: B [table already has rows, newly added column should be null, if not null – you must provide provide default]

Q23. Find valid SQL of the following?
A. Alter table T1 alter C1 int
B. Alter table T1 Modify C1 int
C. Alter table T1 alter Column C1 int
D. Alter table T1 modify column C1 int
Answer: C

Q24. Which of the following columns you can drop?
A. A replicated column
B. A column that is a part of an index
C. A computed column
D. A column that is a part of a constraint
Answer: C

Q25. How many system datatypes are there in SQL Server 2012?
A. 27
B. 29
C. 31
D. 33
Answer: A

Q26. Which of following values a BIT datatype can have?
A. 0
B. 1
C. Null
D. True
Answer: A, B, C

Q27. Which of the following datatypes are of variable size?
A. Binary
B. Char
C. Varchar
D. Nvarchar
E. Image
Answer: C, D, E

Q28. You defined a column as DECIMAL (10, 4), Now find out what are true from the following four?
A. It will have up to 10 digits
B. It will have up to 4 digits
C. It will have up 10 decimal digits
D. It will have up 4 decimal digits
Answer: A, D

Q29. What is the max limit of nchar datatype?
A. 3000 character
B. 4000 character
C. 6000 character
D. 8000 character
Answer: B

Q30. Maximum value in TINYINT column can be _____.
A. 2000
B. 200
C. 255
D. 55
Answer: C

Q31. To create your own datatype which stored procedure will you use?
A. sp_createtype
B. sp_settype
C. sp_addtype
D. sp_storetype
Answer: C

Q32. Which of the following can be a part of a computed column?
A. One or more column in the same database
B. One or more column in the same table
C. A function
D. A constant
Answer: B, C, D

Q33. A computed column can be based on another computed column in the same table.
A. True
B. False
Answer: B

Q34. You can insert value for a computed column.
C. True
D. False

Answer: B

Q35. Which datatype should you use for a column that will hold Boolean values?
A. Binary
B. TINYINT
C. Bit
D. Sql_variant
Answer: C

Chapter 06

1. Which type of constraint deals with one or more columns?
A. Domain constraints
B. Entity constraints
C. Referential Integrity constraints
D. Key constraints
Answer: A
2. Which constraints ensure that a particular column or set of columns meets particular criteria?
A. Domain constraints
B. Entity constraints
C. Referential Integrity constraints
D. Key constraints
Answer: A
3. When do you create Referential integrity constraint?
A. when you want that a value in one column must match the value in another column—in either the same table or, far more typically, a different table.
B. when you want that a column in a table must have a unique value in each row
C. when you want that a particular column or set of columns meets particular criteria
D. when you that a column or set of columns must have non-empty value
Answer: A
4. What is the default behavior of SQL server when you try to delete a parent row if any child rows exists?
A. restrict the parent row from being deleted
B. automatically delete child rows
C. set the value in the child rows to NULL for the referencing column.
D. set the value in the child rows to whatever the default value is for the referencing column
Answer: A
5. What are the possible values of DELETE ACTION for foreign key?
A. SET NULL
B. CASCADE
C. SET DEFAULT
D. NO ACTION
E. RESTRICT
Answer: A, B, C, D
6. Defaults are only used in _____ statements.
A. SELECT
B. INSERT
C. UPDATE
D. DELETE
Answer: B

7. Which constraints you can disable temporarily?
A. FOREIGN KEY
B. CHECK
C. PRIMARY KEY
D. UNIQUE
Answer: A, B
8. To add a constraint, but have it not apply to existing data, you make use of the _____ option when you perform the ALTER TABLE statement that adds your constraint.
A. DISABLE CONSTRAINTS
B. WITH NOCHECK
C. NOCHECK CONSTRAINTS
D. NO ACTION
Answer: A, B

Q1. Which constraints deal with one or more columns?
A. Domain Constraints
B. Entity Constraints
C. Referential integrity constraints
D. Enterprise Constraints
Answer: A

Q2. Entity constrains can be applied on _____?

Which one correctly fits the blank space?
A. individual columns
B. individual rows
Answer: B

Q3. _____ are created when a value in one column must match the value in another column—in either the same table or, far more typically, a different table.
Which one correctly fits the blank space?
A. Domain Constraints
B. Entity Constraints
C. Referential integrity constraints
D. Enterprise Constraints
Answer: C

Q4. Which of the following is or are applicable key constraints in Database system?
A. Primary Key
B. Foreign Key
C. Alternate Key
D. Inversion Key
Answer: A, B, C, D

Q5. Which key constraint provides a way of sorting data rather than enforcing data integrity?
A. Primary Key
B. Foreign Key
C. Alternate Key
D. Inversion Key
Answer: D

Q6. _____ are both a method of ensuring data integrity and a manifestation of the relationships between tables.
Which best fits the blank space?
A. Primary Keys
B. Foreign Keys
C. Alternate Keys
D. Inversion Keys
Answer: B

Integrities +implementation concepts

Q1. Which of the following best defines data integrity?
A. It defines security rules for data access
B. It defines formatting rules for data transformation
C. It defines rules for data accuracy and correctness
D. It enforces uniqueness of data
Answer: C

Q2. Which of the following is true for the domain integrity?
A. It enforces relationship between tables
B. It makes each row in a table unique
C. It defines the valid data for a specific column
D. It defines business rules in the organization
Answer: C

Q3. Which of the following is true for the referential integrity?
A. It enforces relationship between tables
B. It makes each row in a table unique
C. It defines the valid data for a specific column
D. It defines business rules in the organization
Answer: A

Q4. Which entity rule defines business rules that describes the processes in your organization?
A. Domain
B. Entity
C. Referential
D. Enterprise
Answer: D

Q5. With which of the following ways you can implement domain integrity?
A. Datatype
B. Nullibility
C. Primary Key
D. Unique Constraint
E. Default Constraint
F. Check Constraint

G. Foreign key

Answer: A, B, E, F

Q6. Which of the following rules is checked before the insert, update, delete?

A. Declarative integrity
B. Procedural integrity

Answer: A

Q7. Procedural integrity rules are generally checked _____ the insert, update or delete.

A. Before
B. After

Answer: B

Q8. Which of the following can implement entity integrity?

A. Default
B. Rule
C. Stored procedure
D. Trigger

Answer: C, D

Q9. Which of the following can be used to implement Enterprise integrity?

A. Datatype
B. Check constraint
C. Stored procedure
D. Trigger

Answer: C, D

Q10. Procedural integrity may be enforced with which of the following objects?

A. CHECK constraint
B. FOREIGN KEY constraint
C. Stored procedure
D. Trigger

Answer: C, D [CHECK and FOREIGN KEY are declarative integrity implementations]

Q11. Which of the following integrities can be enforced using a Trigger?

A. Domain Integrity
B. Entity Integrity
C. Referential Integrity
D. Enterprise Integrity

Answer: B, C, D

Q12. How can disable checking existing values while enforcing a constraint on an existing table?

A. Disable all constraints for the table, add the constraint and re-enable constraints
B. Disable all constraints for the database, add the constraint and re-enable constraints
C. Add constraint with NOCHECK option
D. Add constraint with CHECK option

Answer: C [Syntax is – ALTER TABLE tablename WITH NOCHECK ADD CONSTRAINT…… DEFAULT is WITH CHECK, existing values are checked against the constraint is about is to create. WITH NOCHECK, existing values will ignored but future inserts, update will be checked]

Q13. Which statement disables CHECK and FOREIGN KEY constraints on Trainees table?

A. ALTER TABLE Trainees DISABLE CONSTRAINT ALL
B. ALTER TABLE Trainees SET CONSTRAINT ALL OFF
C. ALTER TABLE Trainees NOCHECK CONSTRAINT ALL
D. ALTER TABLE Trainees NOCHECK CONSTRAINT *

Answer: C [ALTER TABLE tablename NOCHECK ALL, it disables all check and foreign key constraints. To disable a particular constraint – ALTER TABLE tablename NOCHECK constraintname. To enable use CHECK]

Q14. You have a table named authors. To find the find constraints applied to your table, which of the following T-SQL statements would you use?

A. sp_showconstraint authors
B. sp_helpconstraint authors
C. sp_findconstraint authors
D. sp_statconstraint authors

Answer: B

Q15. Which Stored procedure do you use to find constraint names in a table?

A. Sp_constarint
B. Sp_helpconstraint
C. Sp_showconstraint
D. Sp_findconstraint

Answer: B

Q16. A column accepts null and has no default value. If no value given for that column in the INSERT statement, what will happen?

A. The column value is null
B. An error occurs
C. The column value is blank for character data and 0 for numeric data
D. You can not omit value in the INSERT statement

Answer: A

Q17. A column does not accept null and has no default value. If no value given for that column in the INSERT statement, what will happen?

A. The column value is null
B. An error occurs
C. The column value is blank for character data and 0 for numeric data
D. You can not omit value in the INSERT statement

Answer: B

Q18. A column does not accept null and has a default value. If no value given for that column in the INSERT statement, what will happen?

A. The column value is null
B. An error occurs
C. The column value is blank for character data and 0 for numeric data
D. The column value is the default value

Answer: D

Q19. Which columns can not have default constraint?

A. TIMESTAMP column
B. IDENTITY column
C. ROWGUIDCOL column
D. MONEY column

Answer: A, B, C

Q20. How can you apply default constraint on a column in a table?

A. At the time of table creation add default constraint after column definition
B. At the of table creation, add default constraint at table level
C. After table creation, create a default object and bind it with the appropriate table column using sp_bindefault stored procedure.
D .None

Answer: A, C

Q21. Your table 'Trainees' has a column 'email' of varchar (50) datatype. Now you want to apply default constraint on the email column.
Which of the following is the correct SQL for that?

A. ALTER TABLE Trainees ADD DEFAULT (email) 'N/A'
B. ALTER TABLE Trainees ADD DEFAULT (email) AS 'N/A'
C. ALTER TABLE Trainees ADD DEFAULT 'N/A' FOR email
D. ALTER TABLE Trainees ADD DEFAULT 'N/A' ON email

Answer: C

Q22. You have a table named courses which has a column startdate of datatype datetime. Now you to add default value for the column which will be current date. Which of the following T-SQL statement or statements are correct for that?

A. ALTER table courses add default getdate() for startdate
B. ALTER table courses add constraint default getdate() for startdate
C. ALTER table courses add constraint df_startdate default getdate() for startdate
D. ALTER table courses add default getdate() on startdate

Answer: A, C

Q23. You have a table T1. You ran the following statement

ALTER TABLE T1 ADD TOTAL MONEY NULL DEFAULT 0 WITH VALUES

What will be the values in the new column in the existing rows?

A. 0
B. NULL
C. SQL will fail
D. Empty

Answer: A

Q24. You have a table named "batches" which already has 23 rows of data.
Now you want to add a column using the following statement
ALTER TABLE courses add no_of_trainee not null default 15 with values

What will be the value in no_of_trainee column in existing rows?

A. null

B. 0
C. 15
D. This T-SQL statement will not work

Answer: C

Q25. You 'Trainees' already has 120 rows of data. You added a column to the table using following command
ALTER TABLE Trainees ADD [MMA Qualified] BIT NULL DEFAULT 0 WITH VALUES
What will be the column [MMA Qualified] value in existing rows?

A. 0
B. 1
C. NULL
D. It will depend ANSI NULL DEFAULT database option setting

Answer: A

Q26. You have a table T1. You ran the following statement

```
ALTER TABLE T1 ADD TOTAL MONEY NULL
```

What will be the values in the new column in the existing rows?

A. 0
B. NULL
C. SQL will fail
D. Empty

Answer: B

Q27. Which of the following is correct statement?

A. ALTER TABLE T1 ALTER COLUMN C1 DEFAULT 'IDB'
B. ALTER TABLE T1 ALTER COLUMN C1 ADD DEFAULT 'IDB'
C. ALTER TABLE T1 ALTER ADD DEFAULT 'IDB' FOR C1
D. ALTER TABLE T1 ALTER MODIFY C1 ADD DEFAULT 'IDB'

Answer: C

Check Constraint

Q28. You want to implement some validation rule on some columns. And you will use check constraint. Now what are true for a check constraint?

A. Check the value against a defined range of values.
B. Check the value against a list of values.
C. Check the value against values stored in a related table.
D. Check the value against a defined pattern

Answer: A, B, D

Q29. Which of the following statement or statements are true for Check constraint?

A. It must evaluate to a Boolean expression
B. It must check a range
C. It can reference other columns in the same database
D. It can reference other columns in the same table

Answer: A, D

Q30. Which of the following is or are true about check constraints?

A. A column can have more than one check constraints
B. A check constraint must evaluate to a Boolean expression
C. A check constraint can reference other columns in the same table
D. Check constraint must be defined at table level

Answer: A, B, C [The 'must' word is objectionable, you can add CHECK constraint at column if it refers a single column. If it refers more than one column, it must be defined at table level]

Q31. Can a column have multiple check constraints?

A. Yes
B. No

Answer: A

Q32. Check constraint referencing more than one column must be declared at table level?

A. True
B. False

Answer: A

Q33. Consider the following SQL

```
CREATE Table T1
(
        C1 int not null,
        C2 int not null CHECK (C2 > C1)
)
```

Will this SQL work?

A. Yes
B. No

Answer: B

Q34. Which of the following SQL statements will run without error?

A. CREATE TABLE Orders
(
order_id int not null primary key,
order_date Datetime null,
deliver_date Datetime null check (delivery_date > order_date)
)

B. CREATE TABLE Orders
(
order_id int not null primary key,
order_date Datetime null check (delivery_date > order_date),
deliver_date Datetime null
)

C. CREATE TABLE Orders
(
order_id int not null primary key,
order_date Datetime null,
deliver_date Datetime null,
check (delivery_date > order_date)
)

D. CREATE TABLE Orders
(
order_id int not null primary key,
order_date Datetime null,
deliver_date Datetime null,
constraint CK_Orders_Order_date_Delivery_date check (delivery_date > order_date)
)

Answer: C, D (check referencing more than one column, must be at table level)

Q35. You want to add check constraint to an existing table without checking existing values, which option to be use with alter statement?

A. WITH CHECK
B. WITH NOCHECK
C. WITH VALUES
D. NONE

Answer: B

Primary Key/Unique Key

Q36. Where can you define a single column primary key?

A. At column level
B. At Table level

Answer: A, B

Q37. Where can you define a multi-column primary key?

A. At column level
B. At table level

Answer: B

Q38. To add a primary key in an existing table, which of the following restriction does apply?

A. The values already inserted in the column key must be integer
B. The values already inserted in the column key must be Unicode characters
C. The values already inserted in the column key must be unique
D. The values already inserted in the column key must be numeric

Answer: C

Q39. Which of the following columns a foreign key can reference?

A. Columns defined as primary key in the same database
B. Columns defined as unique in the same database
C. Columns defined as not null in the same database
D. All of the above

Answer: A, B

Q40. Which of the following statements are true?

A. Create Table T1
(
Sid int not null primary key,
SName Char(50) null
)

B. Create Table T1
(
Sid int not null,
SName Char(50) null,
primary key(Sid)
)
C. Create Table T1
(
Sid int not null,
SName Char(50) null,
PK_SID primary key (Sid)
)
D. Create Table T1
(
Sid int not null,
SName Char(50) null,
Constraint PK_SID primary key(Sid)
)

Answer: A, B, D [C: To give a a name for a constraint use CONSTRAINT constraintname]

Q41. Which of the following is or are valid SQL to create a table?

A.
```
CREATE TABLE Trainees
(
  T_ID CHAR(7) NOT NULL PRIMARY KEY,
  T_NAME VARCHAR(50) NOT NULL
)
```
B.
```
CREATE TABLE Trainees
(
  T_ID CHAR(7) NOT NULL CONSTARINT PRIMARY KEY,
  T_NAME VARCHAR(50) NOT NULL
)
```
C.
```
CREATE TABLE Trainees
(
  T_ID CHAR(7) NOT NULL CONSTRAINT PK_TID PRIMARY KEY,
  T_NAME VARCHAR(50) NOT NULL
)
```
D.
```
CREATE TABLE Trainees
(
  T_ID CHAR(7) NOT NULL,
  T_NAME VARCHAR(50) NOT NULL,
  PRIMARY KEY(T_ID)
)
```

Answer: A, C, D

Q42. You want to create 'OrderItem' table. Now you want to add multi-column primary key based on Product and OrderID columns. Which of the following SQL is valid for that?

A.
```
CREATE TABLE OrderItem
(
  Product VARCHAR(50) NOT NULL PRAMRY KEY,
  OrderId INT NOT NULL PRAMRY KEY,
  Quantity INT NOT NULL
)
```
B.
```
CREATE TABLE OrderItem
(
  Product VARCHAR(50) NOT NULL PRAMRY KEY(Product),
  OrderId INT NOT NULL PRAMRY KEY(OrderID),
  Quantity INT NOT NULL
)
```
C.
```
CREATE TABLE OrderItem
(
  Product VARCHAR(50) NOT NULL,
  OrderId INT NOT NULL,
  Quantity INT NOT NULL,
  PRAMRY KEY(Product, OrderID)
)
```
D.
```
CREATE TABLE OrderItem
(
  Product VARCHAR(50) NOT NULL,
  OrderId INT NOT NULL  PRAMRY KEY(Product, OrderID),
  Quantity INT NOT NULL

)
```

Answer: C

Q43. You have created a table Orders. Now you want to add primary key constraint on ordered column. Which of the following is or are valid syntaxes for that?

A. Alter table Orders add primary key (orderid)
B. Alter table Orders add constraint primary key (orderid)
C. Alter table Orders add pk_orderid primary key (orderid)
D. Alter table Orders add constraint pk_orderid primary key (orderid)

Answer: A, C [A, D]

Q44. A unique constraint enforces _____.

A. Domain integrity
B. Entity integrity
C. Referential integrity
D. Enterprise integrity

Answer: B

Q45. A primary key column can not allow null.
Is this statement true?

A. Yes
B. No

Answer: A

Q46. A table can have only one primary key column and only one unique column.
Is this statement true?

A. Yes
B. No

Answer: B [A table can have only one primary key, but can have more than one unique column]

Q47. Consider two statements
(I) A table can have more than one primary key constrains
(II) A table can have more than one unique constrains
Find the correct one.

A. Both (I) and (II) are true
B. Both (I) and (II) are false
C. (I) is true but (II) is false
D. (I) is false but (II) is true

Answer: D

Q48. Consider two statements
(I) A primary key can be created on null column
(II) A unique constraint can be created on null column
Find the correct one.

A. Both (I) and (II) are true
B. Both (I) and (II) are false
C. (I) is true but (II) is false
D. (I) is false but (II) is true

Answer: D

Q49. How many Unique Constraint a table can have?

A. Zero
B. One
C. Two
D. Unlimited

Answer: D

Q50. How many Primary Key Constraint a table can have?

A. Zero
B. One
C. Two
D. Unlimited

Answer: B

Foreign Key

Q51. Find the right statements about foreign key.

A. A foreign key can reference any type of column in a table in the same database
B. A foreign key can reference a primary key of column in a table in the same database
C. A foreign key can reference a unique column in a table in the same database
D. A foreign key can reference a column in a table in other database

Answer: B, C

Q52. Which of the following columns a foreign key can reference?

A. Columns defined as primary key in the same database

B. Columns defined as unique in the same database
C. Columns defined as not null in the same database
D. All of the above

Answer: A, B

Q53. You want to relate two tables and you to make sure that if parent key is deleted then all the related children will be deleted. How can you do it in declarative way?

A. Create a DELETE trigger on parent table and write code in trigger to delete children of deleted parent
B. Use stored procedure to delete parent and write appropriate code for the child deletion
C. Define the foreign key with CASCADE DELETE action
D. SQL does not support this feature

Answer: C [Question asked declarative way. A, B are procedural]

Q54. Which of the following statements are true?

A. Create Table T1
(
Sid int not null,
SName Char(50) null,
CourseId int not null references Courses(CourseId)
)
B. Create Table T1
(
Sid int not null,
SName Char(50) null,
CourseId int not null Constraint references Courses(CourseId)
)
C. Create Table T1
(
Sid int not null,
SName Char(50) null,
CourseId int not null Constraint FK_CID references Courses(CourseId)
)
D. None

Answer: A, C

Chapter 07

1. For which of the following needs A SUB-QUERY is used?
   A. Break a query up into a series of logical steps
   B. Provide a listing to be the target of a WHERE clause together with [IN I EXISTS I ANY I ALL[
   C. To provide a lookup driven by each record in a parent query
   D. To extract useful information from multiple tables

Answer: A, B, C

2. Which one must be true when you use a sub-query in WHERE clause with ="" ? operator
   A. The sub-query must return a single value
   B. The sub-query must return a list of values
   C. The sub-query must be correlated with outer query
   D. You cannot use a sub-query in WHERE clause with "=" operator

Answer: A

3. Which operator cannot be used when a sub-query in WHERE clause return sa list of values?
   A. IN
   B. EXISTS
   C. ANY
   D. >

Answer: D

4. Consider the following tow statements

Statement I: a correlated sub-query is evaluatedonly on ceirrespective of how many rows the outer query returns.
Statement II: a correlated sub-query is evaluated once for each row processed by the outer query.
Now choose the correct one about the above statements?

   A. Statement I is true but Statement II is false
   B. Statement I is false but Statement II is true
   C. Both Statement I and Statement II are false
   D. Both Statement I and Statement II are true

Answer: B

5. Which one allows date conversions with formatting?
   A. CAST
   B. CONVERT

Answer: B

6. The _____ operator return a simple TRUE/FALSE regarding thee xistence of datathat meets the criteria established in the query that it is operating against.
   A. EXISTS
   B. IN
   C. WHERE
   D. DISTINCT

Answer: A

7. Which one you can use to check for the existence of an object before running a crea testatement?
   A. EXISTS
   B. IN
   C. ALL
   D. ANY

Answer: A

8. _____ is made up of the columns and rows of a result set froma query.
   A. A derived table
   B. A sub-query
   C. Aggregate
   D. A correlated sub-query

Answer: A

9. To create a derived table what criteria you must meet?
   A. enclose the query that generates the result set in parentheses
   B. alias the results of the query
   C. enclose the query that generates the result set in a UDF
   D. declare a variable table

Answer: A, B

8. Which function should you use to covert a date value with specified formatting?
   A. COLCASE
   B. CAST
   C. CONVERT
   D. SUBSTRING

Answer: C

10. It is a normal T-SQL query but nested inside another query.
What is it?
   A. Nested query
   B. Subquery
   C. Embedded query
   D. Correlated query

Answer: B

11. _____ is used inside another query.
   E. An aggregate operator
   F. A join
   G. A subquery
   H. A scalar

Answer: C

12. In a SELECT statement, where can you place a subquery?
   E. In the SELECT list
   F. In the FROM clause
   G. In the WHERE Clause (mostly used)
   H. In the ORDER By clause

Answer: A, B, C

13. Why do we use a subquery?
   A. Break a query up into a series of logical steps
   B. Provide a listing to be the target of a WHERE clause together with [IN | EXISTS | ANY | ALL]
   C. To provide a lookup driven by each individual record in a parent query
   D. To provide summary information

Answer: A, B, C

14. What is the difference between a typical subquery and a correlated subquery?
   A. A typical subquery can be used only in where clause but a correlated subquery can be used anywhere
   B. A typical subquery is processed only once but a correlated subquery is processed each time when the outer query is processed
   C. A typical subquery cannot be used as derived table but you can use a correlated subquery as a derived table
   D. There is no difference between the two

Answer: B

15. ISNULL(10, 15) – what should the function return?

A. NULL
B. 10
C. 15
D. 0

Answer: B

16. ISNULL(NULL, 15) – what should the function return?
A. NULL
B. 10
C. 15
D. 0

Answer: 15

17. _____ is made up of the columns and rows of a result set from a query?
Pick the correct one for the blank space?
A. A sub table
B. A result set
C. A derived table
D. A inner table

Answer: C

18. What does the EXISTS function do?
A. It accepts a database name and returns true if the database is attached with current server otherwise false
B. It accepts a table name and returns true if the table is present in current server otherwise false
C. It accepts a SELECT query and returns true if the query returns at least one row otherwise false
D. None of the above

Answer: C

Chapter 08

1. Which of the following correctly define normalization?
A. applying constraints so that wrong data cannot be entered into the system
B. breaking out data into a logical, non-repetitive format that can easily be reassembled into the whole
C. giving an attribute to an entity so that it can be uniquely identified
D. creating indexes so that specific data can be retrieved faster

Answer: B

2. _____ is a collection of instances of data that have the same general attributes.
A. A table
B. An index
C. A database
D. A primary key

Answer: A

3. "A drawing of the various entities (tables) and relationships (how they work together)"
What is it?
A. Data Diagram
B. Relationship diagram
C. Entity diagram
D. Entity-Relationship diagram

Answer: D

4. What are the qualities a table should have to be an entity in the relational database sense?
A. The table should describe one and only one entity.
B. All rows must be unique, and there must be a primary key.
C. The column and row order must not matter.
D. The table must have at least one index.

Answer: A, B, C

5. What are candidate keys?
A. the columns that are used as part of primary key.
B. the columns that can potentially be used to uniquely identify each row in your entity.
C. the columns that are not part of primary key but allow accessing the entity.
D. the columns that ate not natural attributes of the entity but added to it.

Answer: B

6. Derived column is an example of _____.
A. Normalization
B. De-Normalization

Answer: B

7. In SQL Server, One-to-Zero, One, or Many can be enforced using
A. Foreign key constraint
B. Default constraint
C. Check constraint
D. Trigger

Answer: A, B

8. The concepts of normalization are highly dependent on issues surrounding the definition of the _____ and what columns are dependent on it.
    A. primary key
    B. foreign key
    C. unique key
    D. compound key

Answer: A

Q9. _____ is a collection of instances of data that have the same general attributes?
Pick the correct one for the blank space?
    A. A database
    B. A table
    C. A Record
    D. A Field

Answer: B

Q10. When an instance of a parent entity is associated with zero, one or many instances of the child entity, what type of relationship it should be?
    A. One-to-one relationship.
    B. one-to-many relationship
    C. many-to-many relationship
    D. there is no relationship

Answer: B

Q11. many-to-many Relationships can be directly implemented in a relational database.
    A. True
    B. False

Answer: B

Q12. There is many-to-many relationship between Orders and Products. We inserted a Orderline entity to transform this relationship into two one-to-many relationships. What type of entity the Orderline is?
    A. Parent
    B. Child
    C. Source
    D. Association

Answer: D

Q13. "Every employee reports to a manager and the manager is also an employee" – What type of relationship we are talking about?
    A. one-to-one
    B. one-to-many
    C. many-to-many
    D. recursive

Answer: D

Q14. What do we call an attribute or a set of attributes that uniquely identify each instance of an entity?
    A. Primary key
    B. Unique key
    C. Candidate key
    D. Artificial key

Answer: A

Q15. Passport number, Email address and Employee Identification number – each uniquely identifies an employee but you defined Employee Identification number as primary key. Now what do we call other two attributes excepting Employee Identification number?
    A. Candidate key
    B. Alternate key
    C. Artificial key
    D. None

Answer: B

Q16. Sometimes candidate key are too large, sometimes there is no suitable candidate key – and problem arises to select primary key. How can solve the problem?
    A. For the case of large candidate key, create a new a attribute composed of part of candidate attribute and define it as primary key.
    B. Recreate the entities with appropriate primary keys
    C. Introduce a artificial key, that will be generated by system and define it as primary key
    D. Employ any of the following

Answer: C

Q17. How alternate key is enforced in SQL Server 2000?

A. By using NOT NULL attribute
B. By an primary key attribute
C. By using unique constraint
D. By using unique index

Answer: A, C, D

Q18. How many types of integrity are there in RDBMS?

A. 6
B. 5
C. 4
D. 3

Answer: C

Q19. Which of following defines domain integrity?

A. The datatype and the length
B. Nullibility of an attribute
C. Primary key
D. Reference
E. Allowable data values
F. Default value

Answer: A, B, E, F

Q20. What type of attribute GUID is?

A. Character
B. Numeric
C. Special
D. Binary

Answer: C

Q21. Which of the following is the core of entity integrity?

A. Primary key
B. Foreign key
C. Default constraint
D. Unique constraint

Answer: A

Q22. How many normal forms can there be in a relational model?

A. 4
B. 5
C. 6
D. 7

Answer: C

Q23. Which of the following are conditions for a relational table to be in 1 NF?

A. It has a primary key
B. Each column is atomic
C. Every non-key column is fully functionally dependent on the primary key.
D. There is no repeating groups of column

Answer: A, B, D

Q24. Which are denormalization techniques?

A. Adding redundant column
B. Adding derived column
C. Partitioning table
D. Relating table

Answer: A, B, C

Q25. Which one is the redundant column?

A. A column that relates parent and child tables
B. A column that exists in both parent and child table
C. A column whose values are calculated from values of one or more columns of the same table or other tables.
D. None

Answer: B