1. LINQ & Entity Framework features are introduced in which version of .Net Framework?
2. .Net Framework 2.0
3. .Net Framework 3.0
4. .Net Framework 3.5
5. .Net Framework 4.5
6. Identify the correct sequence of compilation and execution of C# program
7. a. C# Source Code -> CSC compiler -> MSIL code -> CLR [JIT] -> Native Code
8. b. C# Source Code -> CLR [JIT] -> Native Code -> CSC compiler -> MSIL code
9. c. C# Source Code -> CSC compiler -> Native Code -> CLR [JIT] ->MSIL code
10. d. C# Source Code -> CLR [CSC compiler -> MSIL code -> JIT] -> Native Code

3. Which of the following access specifiers are applicable for class in C#?

a. internal, public

b. internal, public, protected

c. internal, public, protected, private

d. internal, public, protected, protected internal, private

4. Which code segment is an example of implicit boxing?

a. int i=45;  
 object j = i;

b. int i = 45;  
 object j = (object)i;

c. object j = 45;  
 int i = (int)j;

d. object j =45;  
 int i = Convert.ToInt32(j);

5. A HashTable, stateList object maintains a collection of names of states and capital city of each state. Which among the following finds out whether “New Delhi” state is present in the collection or not?

a. stateList.HasValue(“New Delhi”);

b. stateList.ContainsKey(“New Delhi”);

c. stateList.HasKey(“New Delhi”);

d. stateList.ContainsValue(“New Delhi”);

6. Predict the behaviour of the below code snippet   
using System.Collections;   
class DemoClass   
 {  
 static void Main()  
 {  
 ArrayList serialNumbers = new ArrayList();  
 serialNumbers.Add(1);  
 serialNumbers.Add(2);  
 serialNumbers.Add(3);  
 serialNumbers.Add("Four");  
  
 foreach (var num in serialNumbers)  
 {  
 System.Console.WriteLine(num);  
 }  
 serialNumbers.Sort();  
 serialNumbers.Reverse();  
 System.Console.WriteLine("Display numbers in descending order");  
 foreach (var num in serialNumbers)  
 {  
 System.Console.WriteLine(num);  
 }  
 System.Console.ReadKey();  
 }  
 }

1. Code will fail to compile by throwing an error, you cannot store string inside the serialNumbers object

b. Code will fail to execute by throwing runtime error, InvalidOperationException

c. Code will compile & execute. Shows numbers in descending order

d. Code will fail to compile, by throwing an error ArrayList could not be found

1. using System;  
    using System.Collections.Generic;  
    class Demo  
    {  
    static void Main()  
    {  
    Stack<string> msgs = new Stack<string>();  
    msgs.Push("Hi");  
    msgs.Push("Hello");  
    msgs.Push("How are you?");  
     
    foreach (var msg in msgs)  
    {  
    Console.WriteLine(msg);  
    }  
    Console.ReadKey();  
    }  
    }

a. Code will execute and shows output as How are you? Hello Hi, each msg on new line

b. Code will execute and shows output as Hi Hello How are you?, each msg on new line

c. Code will fail to compile by throwing an error, Stack could not be found

d. Code will fail to compile by throwing an error, Push method not found in Stack class

8. Which of the following keyword can stop function overriding in C#?

a. static

b. virtual

c. abstract

d. new

9. Which of the following type cannot be used for function parameter and function return type?

a. var

b. object

c. string

d. new

10. Choose the correct type of variable scope for the given defined variables.  
 class ABC  
 {  
 static int m;  
 int n;  
  
 public ABC (int x , ref int y, out int z, int[] a)  
 {  
 int j = 10;  
 }  
}

a. m = class variable, n = local variable, x = output parameter, y = reference parameter, j = instance variable, z =output parameter, a[0]= array element

b. m = class variable, n = instance variable, x = value parameter, y = reference parameter, j = local variable, z =output parameter , a[0] = array element

c. m = class variable, n = instance variable, x = reference parameter, y = value parameter, j = local variable, z =output parameter, a[0] = array element

d. m = local variable, n = instance variable, x = reference parameter, y = value parameter, j = class variable, z =output parameter, a[0] = array element

11. If the Calculator class had FirstNumber property with get accessors/read only property, then which of the following statements will work correctly?

a. Calculator m = new Calculator ();  
calc.FirstNumber = 10;

b. Calculator m = new Calculator ();  
calc.FirstNumber = calc.FirstNumber + 20;

c. Calculator calc = new Calculator ();  
int i = calc.FirstNumber;

d. Calculator.FirstNumber = 20;

12. By using which operator, the delegates add events to one another.

a. -=

b. +=

c. =

d. :=

13. Which of the following is a correct syntax to declare a event in C# ?

a. delegate MyEventHandler(string message);  
event ClickEvent MyEventHandler;

b. delegate MyEventHandler(string message);  
event MyEventHandler ClickEvent;

c. event MyEventHandler ClickEvent;  
delegate MyEventHandler(string message);

d. delegate MyEventHandler(string message);  
event ClickEvent;

14. Identify the correct alternative option for below given code snippet  
Func<float, float, float> product = delegate(float a, float b){  
 float result = a \* b;  
 return result;  
};

1. Func<float, float> product = (a, b) => { float result = a\*b; return result; };

b. Func<float, float, float> product =   
(a, b) => { float result = a\*b; return result; };

c. Func<float, float> product = (a, b) -> { float result = a\*b; return result; };

d. Func<float, float, float> product = (a, b) -> { float result = a\*b; return result; };

15. Which of the following statements are true about exception block?

a. For every try block, finally block is must.

b. For every try block there has to be at least one catch block or one finaly block if catch block does not exist

c. finally block will not be executed if catch block matches raised exception

d. we cannot have nested try catch blocks

e. Catch handler with Exception class can be written anywhere after try block

16. What would be the output of following code snippet?  
using System;  
class Demo {   
public static void Main(){  
 try   
 {  
 int a, b;  
 b = 0;  
 a = 10 / b;  
Console.WriteLine("A");  
 }  
 catch(ArithmeticException e)   
 {  
Console.WriteLine("B");   
 }  
Console.ReadLine();  
 }  
}

a. A

b. B

c. Compile time error

d. Run time error

e. Outputs: A & B

17. Identify the correct syntax to create Custom Exception in C#

a. class InvalidMobileNumberException : ApplicationException  
{  
 public InvalidMobileNumberException(string message) : base(message)  
 { }  
}

b. class InvalidMobileNumberException extends ApplicationException  
{  
 public InvalidMobileNumberException(string message) : base(message)  
 { }  
}

c. class InvalidMobileNumberException : ApplicationException  
{  
 public InvalidMobileNumberException(string message){ }  
}

d. class InvalidMobileNumberException : ApplicationException  
{  
 public InvalidMobileNumberException() : base(message)  
 { }  
}

18. When you drop table, what all dependent objects will be dropped?

a. Only Constraints and Indexes

b. Constraints, Indexes, Triggers

c. Constraints, Indexes, Procedures

19. Predict the output of below code snippet  
using System.IO;  
class Demo{  
 public static void Main(){  
 DirectoryInfo mydirInfo = new DirectoryInfo(@"D:\Data");  
 FileInfo[] FI = mydirInfo.GetFiles();  
   
 foreach (FileInfo file in FI)  
 System.Console.WriteLine("File Name is {0} || size is {1}",file.Name, file.Length);  
 }  
}

a. Displays All files and Folders of DataFolder with Name and Size

b. Generates Compile time error, DirectoryInfo and FileInfo could not be found

c. Runtime error

d. Displays only files of Data Folder with Name and Size

20. Identify the correct option to read data of employee from file

a. string path = @"D:\EmpInfo";  
  
 FileStream fsStreamObj = new FileStream(path + @"\emp.txt",FileMode.Open);  
 StreamReader readerObj = new StreamReader(fsStreamObj);  
 string data = readerObj.ReadToEnd();  
 System.Console.WriteLine(data);  
  
 readerObj.Close();  
 fsStreamObj.Close();

b. string path = @"D:\EmpInfo";  
  
 FileStream fsStreamObj = new FileStream(path + @"\emp.txt",FileMode.Open);  
 StreamReader readerObj = new StreamReader();  
 string data = readerObj.ReadToEnd();  
 System.Console.WriteLine(data);  
  
 readerObj.Close();  
 fsStreamObj.Close();

c. string path = @"D:\EmpInfo";  
  
 FileStream fsStreamObj = new FileStream(path + @"\emp.txt",FileMode.CreateNew);  
 StreamReader readerObj = new StreamReader(fsStreamObj);  
 string data = readerObj.ReadToEnd();  
 System.Console.WriteLine(data);  
  
 readerObj.Close();  
 fsStreamObj.Close();

d. string path = @"D:\EmpInfo";  
  
 FileStream fsStreamObj = new FileStream(path + @"\emp.txt",FileMode.Open);  
 StreamReader readerObj = new StreamReader(fsStreamObj );  
 string data = readerObj.ReadLine();  
 System.Console.WriteLine(data);  
  
 readerObj.Close();  
 fsStreamObj.Close();

21. Predict the behavior of below given code snippet  
[Serializable]  
class Customer{  
 public int Cid {get; set;}  
 public string Name {get; set;}  
  
 public Customer(){  
   
}  
public Customer(int cid, string name){  
 this.Cid = cid;  
 this.Name = name;  
}  
}  
The above Customer class will make use of XmlSerializer.

a. Compile time error, must apply public access specifier to class Customer

b. Runtime error, must apply public access specifier to class Customer

c. Compile time error, you cannot have default constructor during XmlSerialization

d. Code will execute without any error

22. Which of the following tool is used to register the assembly to the Global Assembly Cache?

a. RegSvr.exe

b. GacUtil.exe

c. GacUtility.exe

23. By default, after applying primary key and unique to the columns, which type of indexes will be created automatically?

a. Unique Clustered Index for Primary key column, Unique Non Clustered Index for Unique key column

b. Unique Clustered Index for Primary key column, Non Unique Non Clustered Index for Unique key column

c. Unique Clustered Index for Primary key column, Non Unique Clustered Index for Unique key column

d. Unique Non Clustered Index for Primary key column, Unique Clustered Index for Unique key column

24. Which one of the following is the correct syntax to retrieve the connection string from app.config file.  
(Assume that "myconnection" is the name of the connection string).

a. ConfigurationManager["myconnection"].ToString()

b. ConfigurationManager["myconnection"].ConnectionString

c. ConfigurationManager.ConnectionString["myconnection"].ConnectionStrings

d. ConfigurationManager.ConnectionStrings["myconnection"].ConnectionString

25. A database contain a table called "emp" that has a column called "DeptId" which represents the department ID the employee belongs to.  
What is the code you would need to write to retrieve all the details of employee belonging to the given department using a parameterized query in ADO.NET?  
Note: Assume that a con object is created for SqlConnection class with appropriate connection string and connection has been already opened.

a. Console.WriteLine("Enter the Dept id:");   
int did = int.Parse(Console.ReadLine());   
  
SqlCommand cmd = new SqlCommand("select \* from emp where deptid=@deptid", con);  
Parameters.AddWithValue("@deptid", did);   
  
SqlDataReader dr = cmd.ExecuteReader();

b. Console.WriteLine("Enter the Dept id:");   
int did = int.Parse(Console.ReadLine());   
  
SqlCommand cmd = new SqlCommand("select \* from emp where deptid=@deptid", con);  
cmd.Parameters.AddWithValue("@deptid", did);   
  
SqlDataReader dr = cmd.ExecuteReader();

c. Console.WriteLine("Enter the Dept id:");   
int did = int.Parse(Console.ReadLine());   
  
SqlCommand cmd = new SqlCommand("select \* from emp where deptid=@deptid", con);  
cmd.CommandType=CommandType.StoreProcedure;   
cmd.Parameters.AddWithValue("@deptid", did);   
  
SqlDataReader dr = cmd.ExecuteReader();

d. Console.WriteLine("Enter the Dept id:");   
int did = int.Parse(Console.ReadLine());   
  
SqlCommand cmd = new SqlCommand("select \* from emp where deptid=@deptid", con);  
cmd.Parameters.AddWithValue("@deptid", did);   
  
SqlDataReader dr = cmd.ExecuteNonQueryr();

26. What will be the output of the following code snippet?  
using System.Data.SqlClient;  
class Program  
{  
public static void Main()  
{  
SqlConnection con= new SqlConnection("data source=MYPC;initial catalog=mydb;integrated security=true");  
SqlCommand cmd = new SqlCommand("select \* from Emp",con);  
SqlDataReader dr= cmd.ExecuteReader();  
while(dr.Read())  
{  
 Console.WriteLine(dr[0]);  
}  
}  
}

a. Compile time error, connection is not opened with datasource

b. Runtime error, connection is not opened with datasource

c. No Error, Displays All Rows and All Columns data of Emp table

d. No Error, Displays First Column data of Emp table

27. \_\_\_\_\_\_\_\_\_\_\_\_& \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_functions are used by SqlDataAdapter object to load and modify DataSet and DataTable in ADO .Net

a. Fill() & Update()

b. Load() & Modify()

c. Save() & Update()

d. Fill() & Modify()

28. You want to hide the script of below given view.  
CREATE VIEW vw\_GetAllMumbaiCustomers  
AS  
SELECT cid, name, address, prodName  
FROM Customer  
WHERE address = 'Mumbai'  
  
From the below given options, identify the correct one which fullfil my requirement.

a. CREATE VIEW vw\_GetAllMumbaiCustomers  
WITH ENCRYPTION  
AS  
SELECT cid, name, address, prodName  
FROM Customer  
WHERE address = 'Mumbai'

b. You can not hide the defintion or body of view

c. CREATE VIEW vw\_GetAllMumbaiCustomers  
AS  
SELECT cid, name, address, prodName  
FROM Customer  
WHERE address = 'Mumbai'  
WITH ENCRYPTION

d. CREATE VIEW vw\_GetAllMumbaiCustomers  
WITH ENCRYPT  
AS  
SELECT cid, name, address, prodName  
FROM Customer  
WHERE address = 'Mumbai'

29. Method Overloading deals with having multiple Method with \_\_\_\_\_\_\_\_ name and \_\_\_\_\_\_\_\_ parameter.

a. Different, Same

b. Same, All

c. Same, Different

d. None of the above

30. Which is the build number of a version object instantiated by using the following code fragment?  
Version v = new Version (2, 4, 6, 8);

a. 2

b. 4

c. 6

d.8

31. Identify the multirow subquery operators from the below options

a. =, <, >, !=, <>, >=, <=

b. IN, ANY

c. IN, ANY, ALL, EXISTS

d. AND, OR, NOT

32. Which of the following are qualified for Function Overloading

a. public int calc(int, float) public void calc(int, float)

b. public void calc(int, float) public int calc(int, float)

c. public int calc(float, int) public int calc(int, float)

d. public int calc(float) public int calc(int, float)

33. State true or false   
 Static variables continue to exist even after the block in which they are defined terminates

a. TRUE

b. FALSE

34. Which property need to be set to configure a Command object to execute a stored procedure?

a. Command

b. CommandType

c. CommandName

d. CommandMode

35. What will be the output of the following set of code? class sum {  
 public int x;  
 private int y;  
 public void math(int a, int b)  
 {  
 x = a \* 4;  
 y = b;  
 } }   
 class Program {  
 static void Main(string[] args)  
 {  
 sum p = new sum();   
 p.math(12, 30);  
 Console.WriteLine(p.x + " " + p.y);  
 Console.ReadLine();  
 } }

a. 48, 30

b. 48, 0

c. 0, 0

d. Compile time error

36. The output of the following query  
SELECT last\_name, Emp.dept\_id, city FROM Emp, Dept, Locations WHERE Emp.dept\_id = Dept.dept\_id ;   
is equivalent to what ?

a. INNER JOIN

b. SELF JOIN

c. CARTESIAN PRODUCT

d. OUTER JOIN

37. Evaluate below query :   
 SELECT deptno, job, AVG(Sal) FROM Emp GROUP BY Deptno HAVING COUNT(\*) > 5;

a. Query is syntactically correct

b. Query will not be executed saying " not a GROUP BY expression"

c. Query will not be executed as 2 columns can not be specified after SELECT in case of GROUP BY clause

d. Query will not be executed saying " SQL Command not properly ended

38. Find the error in the below statement. Create function dept\_count(@dept\_name varchar(20))  
AS  
begin  
declare d\_count AS int  
select d\_count=count(\*) from instructor  
where instructor.dept\_name= @dept\_name  
return d\_count  
end

1. Return type missing
2. Dept\_name is mismatched
3. Reference relation is not mentioned

d. No Error

39. What will be the output for following query   
SELECT Empno,Deptno, sal,Hiredate FROM Emp ORDER BY Deptno, sal DESC;

a. It will reorder all the records according to the ascending order of deptno and then only those rows will be reordered in the descending order of sal for which deptno is same.

b. It will reorder all the records according to the descending order of deptno and then only those rows will be reordered in the descending order of sal for which deptno is same.

c. It will reorder all the records according to the ascending order of deptno and then all the records will be reordered in the descending order of sal

d. It will reorder all the records according to the descending order of deptno and then all the records will be reordered in the descending order of sal

40. Predict the output of below code:  
CREATE TABLE Emp1 (   
Empno NUMBER(4) PRIMARY KEY,  
Ename varchar2(20),  
Hiredate DATE,  
Deptno NUMBER(4) REFERENCES Dept(Deptno) UNIQUE );

a. Table will be created successfully

b. Table will not be created showing error "Invalid use of Foreign Key"

c. Table will not be created showing error "Foreign Key can not be UNIQUE"

d. Table will not be created showing error "invalid CREATE command"

41. Predict the output of following query:  
SELECT Ename FROM Emp WHERE ename like '%T\_' ;

a. It will List Employee Names having T as second character

b. It will List Employee Names having T as second last character

c. It will List Employee Names having exactly 3 characters

d. None From the Options

42. Complete the following statement:  
In SELECT Statement \_\_\_\_\_\_\_\_\_\_\_\_\_\_ clause is used for conditional retrieval of groups

a. HAVING

b. WHERE

c. ORDER BY

d. None from the options

43. Which of the following statements can be part of a Database Transaction in multiples?

a. DDL

b. DML

c. DCL

d. TCL

44. 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 BEFORE INSERT trigger.

a. for insert, on

b. On, for insert

c. For, insert

d. None of the mentioned

45. Point out the Incorrect statement :

a. Stored procedures assist in achieving a consistent implementation of logic across applications

b. A stored procedure is a group of Transact-SQL statements compiled into a single execution plan

c. Stored procedures can also improve performance

d. Stored procedures does not allow exceptions and transactions

46. The \_\_\_\_\_\_ clause allows us to select only those rows in the result relation of the \_\_\_\_ clause that satisfy a specified predicate.

a. Where, from

b. From, Select

c. Select, From

d. From, Where

47. The HAVING clause does which of the following?

a. Acts like a WHERE clause but is used for groups rather than rows.

b. Acts like a WHERE clause but is used for rows rather than columns

c. Acts like a WHERE clause but is used for columns rather than groups.

d. Acts EXACTLY like a WHERE clause.

48. 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 above

49. You want to create procedure which will take parameter of desig, based on the desig, you will have to return the list of employees. Identitfy the correct procedure from the below options which will satisfy my requirement.

a. CREATE PROCEDURE prc\_GetEmpsByDesig (@p\_desig AS VARCHAR(10))  
AS  
BEGIN  
SELECT \*  
FROM Employee  
WHERE desig = @p\_desig  
END

b. CREATE PROCEDURE prc\_GetEmpsByDesig (p\_desig AS VARCHAR(10))  
AS  
BEGIN  
SELECT \*  
FROM Employee  
WHERE desig = @p\_desig  
END

c. CREATE PROCEDURE prc\_GetEmpsByDesig (@p\_desig AS VARCHAR(10))  
AS  
BEGIN  
SELECT \*  
FROM Employee  
WHERE desig = p\_desig  
END

d. CREATE PROCEDURE prc\_GetEmpsByDesig   
AS  
BEGIN  
SELECT \*  
FROM Employee  
WHERE desig = p\_desig  
END

50. Identify the behaviour of below given subquery.  
SELECT empName, salary  
FROM Employee  
WHERE salary = (SELECT salary   
FROM Employee  
WHERE desig = 'Developer')

a. It will return empName and salary of the employees whose salary is equal to the salary of employees whose designation is Developer

b. It will compile time error because of incorrect syntax

c. It will throw runtime error, since subquery returns more than one row

d. It will return empName and Salry of one employee whose Designation is Developer