

Microsoft

Exam 98-361

Software Development Fundamentals

Version: 10.0

[Total Questions: 276]

Topic break down

Topic	No. of Questions
Topic 1: C#	137
Topic 2: VB	139

Topic 1, C#**Question No : 1 HOTSPOT - (Topic 1)**

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Statement	Yes	No
XHTML attribute names must be in uppercase.	<input type="radio"/>	<input type="radio"/>
XHTML attribute values must be in quotation marks.	<input type="radio"/>	<input type="radio"/>
XHTML attribute minimization is forbidden.	<input type="radio"/>	<input type="radio"/>

Answer:**Answer Area**

Statement	Yes	No
XHTML attribute names must be in uppercase.	<input type="radio"/>	<input checked="" type="radio"/>
XHTML attribute values must be in quotation marks.	<input checked="" type="radio"/>	<input type="radio"/>
XHTML attribute minimization is forbidden.	<input checked="" type="radio"/>	<input type="radio"/>

Question No : 2 HOTSPOT - (Topic 1)

You are reviewing the following class that is used to manage the results of a 5K race:

```
public class Player
{
    private string _name;
    public const string Key = "player";

    public bool MatchName(string searchTerm)
    {
        return _name.ToLower() == searchTerm;
    }

    public void SetResult(int rank, string name)
    {
        if (_name != null)
            return;

        Ranking = rank;
        _name = name;
    }

    public int Ranking { get; private set; }
}
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Description of Behavior	Yes	No
You can only set the player's ranking once.	<input type="radio"/>	<input type="radio"/>
If you call the MatchName method, the code will throw an exception.	<input type="radio"/>	<input type="radio"/>
You can change Key from "player" to "racer".	<input type="radio"/>	<input type="radio"/>

Answer:**Answer Area**

Description of Behavior	Yes	No
You can only set the player's ranking once.	<input checked="" type="radio"/>	<input type="radio"/>
If you call the MatchName method, the code will throw an exception.	<input type="radio"/>	<input checked="" type="radio"/>
You can change Key from "player" to "racer".	<input type="radio"/>	<input checked="" type="radio"/>

Question No : 3 - (Topic 1)

All objects in .NET inherit from which item?

- A. the System.Object class
- B. a value type
- C. a reference type
- D. the System.Type class

Answer: A

Explanation: The System.Object class supports all classes in the .NET Framework class hierarchy and provides low-level services to derived classes. This is the ultimate base class of all classes in the .NET Framework; it is the root of the type hierarchy.

Question No : 4 - (Topic 1)

Which language was designed for the primary purpose of querying data, modifying data, and managing databases in a Relational Database Management System?

- A. Java
- B. SQL
- C. C++
- D. Visual Basic

Answer: B

Explanation: SQL is a special-purpose programming language designed for managing data held in a relational database management system (RDBMS).

Question No : 5 - (Topic 1)

You are designing a Windows Store application.

You need to design the application so that users can share content by connecting two or more devices by physically tapping the devices together.

Which user experience (UX) guideline for Windows Store applications should you use?

- A. Share and data exchange
- B. location-awareness
- C. device-awareness
- D. proximity gestures

Answer: A**Question No : 6 - (Topic 1)**

Your database administrators will not allow you to write SQL code in your application.

How should you retrieve data in your application?

- A. Script a SELECT statement to a file.
- B. Query a database view.
- C. Call a stored procedure.
- D. Reference an index in the database.

Answer: C

Explanation: The SQL will only be inside the stored procedure.

Question No : 7 - (Topic 1)

You are developing a database that other programmers will query to display race results.

You need to provide the ability to query race results without allowing access to other information in the database.

What should you do?

- A. Disable implicit transactions.
- B. place the query into a stored procedure.
- C. Create an index on the result table.
- D. Add an AFTER UPDATE trigger on the result table to reject updates.

Answer: B

Question No : 8 - (Topic 1)

You plan to create an application for your company. The application will run automated routines and write the results to a text-based log file. Little or no user interaction is required.

Security requirements on the host computers prevent you from running applications on startup, and users must be able to see the status easily on the screen. The host computers also have limited memory and monitors that display only two colors. These computers will have no network connectivity.

Which type of application should you use for this environment?

- A. Directx
- B. Windows Service
- C. console-based
- D. Windows Store app

Answer: C**Explanation:** Building Console Applications

Applications in the .NET Framework can use the System.Console class to read characters from and write characters to the console. Data from the console is read from the standard input stream, data to the console is written to the standard output stream, and error data to the console is written to the standard error output stream.

Question No : 9 - (Topic 1)

You are creating a variable for an application.

You need to store data that has the following characteristics in this variable:

- ✓ Consists of numbers and characters
- ✓ Includes numbers that have decimal points

Which data type should you use?

- A. String
- B. Float
- C. Char
- D. Decimal

Answer: A**Explanation:** Need a string to store characters.**Question No : 10 - (Topic 1)**

Simulating the final design of an application in order to ensure that the development is progressing as expected is referred to as:

- A. Analyzing requirements
- B. Prototyping
- C. Software testing
- D. Flowcharting

Answer: C

Question No : 11 HOTSPOT - (Topic 1)

You are reviewing the following code that saves uploaded images.

```
struct ImageInfo
{
    public byte[] Data;
    public int Length;
    public Guid Id;
}

void Post()
{
    var uploaded = PostedImage();
    var newImage = new ImageInfo();
    newImage.Data = uploaded;
    newImage.Length = uploaded.Length;
    newImage.Id = Guid.NewGuid();
}
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Description of Behavior	Yes	No
The bytes that comprise the image are stored on the stack	<input type="radio"/>	<input type="radio"/>
The length of the image data is stored on the heap.	<input type="radio"/>	<input type="radio"/>
The Id of the image is stored on the stack.	<input type="radio"/>	<input type="radio"/>

Answer:**Answer Area**

Description of Behavior	Yes	No
The bytes that comprise the image are stored on the stack.	<input type="radio"/>	<input checked="" type="radio"/>
The length of the image data is stored on the heap.	<input type="radio"/>	<input checked="" type="radio"/>
The Id of the image is stored on the stack.	<input checked="" type="radio"/>	<input type="radio"/>

Question No : 12 - (Topic 1)

You are creating the necessary variables for an application. The data you will store in these variables has the following characteristics:

- ✍ Consists of numbers
- ✍ Includes numbers that have decimal points
- ✍ Requires more than seven digits of precision

You need to use a data type that will minimize the amount of memory that is used.

Which data type should you use?

- A. decimal
- B. double
- C. byte
- D. float

Answer: B

Explanation: The double keyword signifies a simple type that stores 64-bit floating-point values.

Precision: 15-16 digits

Incorrect:

Not D: The float keyword signifies a simple type that stores 32-bit floating-point values.

Precision: 7 digits

Question No : 13 - (Topic 1)

The throw keyword is used to perform which two actions? (Choose two.)

- A. stop processing of the code
- B. move error handling to a separate thread
- C. raise exceptions
- D. re-throw exceptions as a different type

Answer: C,D

Explanation: * The Throw statement throws an exception that you can handle with structured exception-handling code (Try...Catch...Finally) or unstructured exception-handling code (On Error GoTo). You can use the Throw statement to trap errors within your code because Visual Basic moves up the call stack until it finds the appropriate exception-handling code.

* This example throws an ApplicationException exception.

Throw New ApplicationException

Question No : 14 - (Topic 1)

You execute the following code.

```
for(int i = 0; i <= 100; i++)
{
    if (i % 2 != 0)
    {
        Console.WriteLine("Hello")
    }
}
```

How many times will the word Hello be printed?

- A. 49
- B. 50
- C. 51
- D. 100

Answer: B

Explanation: The % operator computes the remainder after dividing its first operand by its second. All numeric types have predefined remainder operators.

In this case the reminder will be nonzero 50 times (for i with values 1, 3, 5,..,99).

Question No : 15 - (Topic 1)

The purpose of the Catch section in an exception handler is to:

- A. Break out of the error handler.
- B. Conclude the execution of the application.
- C. Execute code only when an exception is thrown.
- D. Execute code regardless of whether an exception is thrown.

Answer: C

Question No : 16 - (Topic 1)

You are building a web application that enables international exchange students to schedule phone calls with their prospective schools.

The application allows students to indicate a preferred date and time for phone calls. Students may indicate no preferred time by leaving the date and time field empty. The application must support multiple time zones.

Which data type should you use to record the student's preferred date and time?

- A. uLong?

- B. DateTime
- C. SByte
- D. DateTimeOffset?

Answer: D

Explanation: DateTimeOffset: Defines a date that is combined with a time of a day that has time zone awareness and is based on a 24-hour clock.

Incorrect:

DateTime: Defines a date that is combined with a time of day with fractional seconds that is based on a 24-hour clock.

sByte: The **sbyte** keyword indicates an integral type that stores values in the range of -128 to 127.

Question No : 17 - (Topic 1)

You are reviewing a design for a database. A portion of this design is shown in the exhibits. Note that you may choose either the Crow's Foot Notation or Chen Notation version of the design. (To view the Crow's Foot Notation, click the Exhibit A button. To view the Chen Notation, click the Exhibit B button.)

Exhibit A**Exhibit B**

Which term is used to describe the Customer component?

- A. Field
- B. Attribute

- C. Property
- D. Entity

Answer: D

Explanation: Customer is a table (entity).

Question No : 18 - (Topic 1)

Which language allows you to dynamically create content on the client side?

- A. Extensible Markup Language (XML)
- B. Cascading Style Sheets (CSS)
- C. Hypertext Markup Language (HTML)
- D. JavaScript (JS)

Answer: D

Explanation: JavaScript (JS) is a dynamic computer programming language. It is most commonly used as part of web browsers, whose implementations allow client-side scripts to interact with the user, control the browser, communicate asynchronously, and alter the document content that is displayed.

Question No : 19 - (Topic 1)

You are writing a Web application that processes room reservation requests. You need to verify that the room that a guest has selected is not already reserved by another guest.

Which type of programming should you use to determine whether the room is still available when the request is made?

- A. client-side
- B. server-side
- C. multithreaded
- D. batch processing

Answer: B

Explanation: For room availability we need to check a database located on a server.

Question No : 20 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

The Response.Redirect method is used to transfer processing of the current page to a new page, and then return processing back to the calling page once processing of the new page has completed.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. Server.Transfer method
- C. Server.Execute method
- D. meta http-equiv="refresh" tag

Answer: C

Explanation: The Execute method calls an .asp file, and processes it as if it were part of the calling ASP script. The Execute method is similar to a procedure call in many programming languages.

Incorrect:

* Response.Redirect Method

The Redirect method causes the browser to redirect the client to a different URL.

* The Server.Transfer method sends all of the information that has been assembled for processing by one .asp file to a second .asp file.

Question No : 21 - (Topic 1)

You are creating a routine that will perform calculations by using a repetition structure. You

need to ensure that the entire loop executes at least once.

Which looping structure should you use?

- A. For
- B. While
- C. Do..While
- D. For. „Each

Answer: C

Explanation: In a Do..While loop the test is at the end of the structure, so it will be executed at least once.

Question No : 22 - (Topic 1)

Which three phrases are advantages of connection pooling? (Choose three.)

- A. reduces time to create a connection
- B. requires no configuration
- C. reduces load on the server
- D. improved scalability
- E. improved performance

Answer: A,D,E

Explanation: E: In connection pooling, after a connection is created, it is placed in the pool and it is used over again so that a new connection does not have to be established.

D: Connection pooling often improves application performance, concurrency and scalability.

A: Connection pooling also cuts down on the amount of time a user must wait to establish a connection to the database.

Question No : 23 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

Unit testing is the final set of tests that must be completed before a feature or product can be considered finished.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. User acceptance
- C. System
- D. Integration

Answer: B

Explanation: User acceptance testing (UAT) is the last phase of the software testing process. During UAT, actual software users test the software to make sure it can handle required tasks in real-world scenarios, according to specifications.

UAT is one of the final and critical software project procedures that must occur before newly developed software is rolled out to the market.

UAT is also known as beta testing, application testing or end user testing.

Question No : 24 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

When creating a site to utilize message queuing, the "IP address" must be configured to MSMQ.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. protocol
- C. host header
- D. port

Answer: B

Explanation: MSMQ is a messaging protocol that allows applications running on separate

servers/processes to communicate in a failsafe manner.

Question No : 25 - (Topic 1)

You are reviewing a design for a database. A portion of this design is shown in the exhibit. Note that you may choose to view either the Crow's Foot Notation or Chen Notation version of the design. (To view the Crow's Foot Notation, click the Exhibit A button. To view the Chen Notation, click the Exhibit B button.)

Exhibit A**Exhibit B**

Which term is used to describe the relationship between Customer and Order?

- A. many-to-many
- B. one-to-many
- C. one-dimensional
- D. one-to-one
- E. multi-dimensional

Answer: B

Explanation: A customer can have many orders.

Question No : 26 - (Topic 1)

Class C and Class D inherit from Class B. Class B inherits from Class A. The classes have

the methods shown in the following table.

Class	Method
A	m1
B	m2
C	m3
D	m4

All methods have a protected scope.

Which methods does Class C have access to?

- A. only m3, m4
- B. only m2, m3
- C. only m1, m3
- D. m1, m3, m3
- E. m2, m3, m4
- F. m1, m2, m3

Answer: F

Question No : 27 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

To improve performance, a SQL SELECT statement should use indexes.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. joins
- C. grouping
- D. ordering

Answer: A

Question No : 28 - (Topic 1)

You need to debug a Windows Service application by using breakpoints.

What should you do?

- A. Write all events to an event log.
- B. Set the Windows Service status to Paused.
- C. Implement the Console.WriteLine method throughout the Windows Service.
- D. Use the Attach to Process menu in Microsoft Visual Studio.

Answer: D

Explanation: * Because a service must be run from within the context of the Services Control Manager rather than from within Visual Studio, debugging a service is not as straightforward as debugging other Visual Studio application types. To debug a service, you must start the service and then attach a debugger to the process in which it is running.

* To debug a service

Install your service.

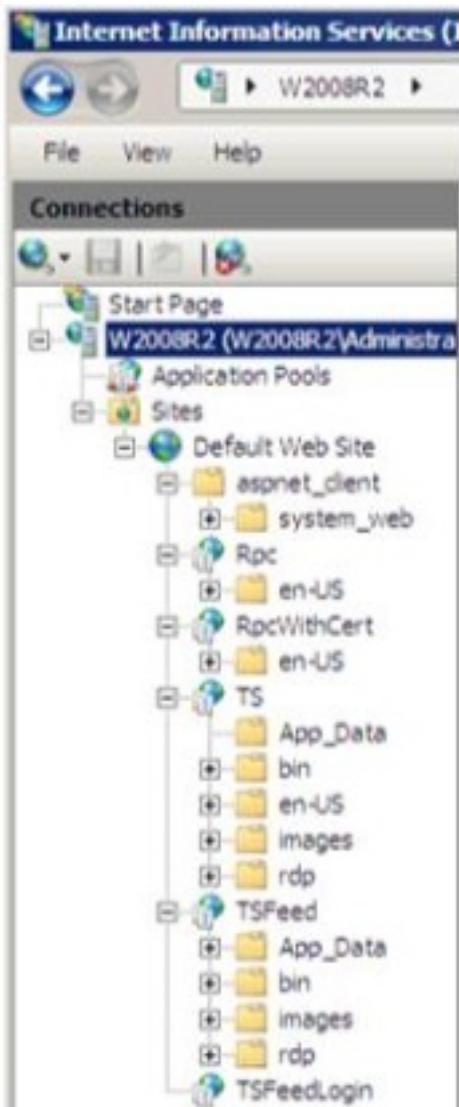
Start your service, either from Services Control Manager, Server Explorer, or from code.

In Visual Studio, choose Attach to Process from the Debug menu.

Etc.

Question No : 29 HOTSPOT - (Topic 1)

You open the Internet Information Services 7.5 Manager console as shown in the following exhibit:



You need to examine the current configuration of the server W2008R2.

Use the drop-down menus to select the answer choice that answers each question. Each correct selection is worth one point.

Answer Area

How many sites are configured on server
W2008R2?

How many applications are configured on server
W2008R2?

Answer Area

How many sites are configured on server W2008R2?

0
1
5
13

How many applications are configured on server W2008R2?

0
1
5
13

Answer:**Answer Area**

How many sites are configured on server W2008R2?

0
1
5
13

How many applications are configured on server W2008R2?

0
1
5
13

Question No : 30 - (Topic 1)

You execute the following code.

```
bool beakerFull = true;
bool flameOn = false;
int iResult;

switch (beakerFull)
{
    case true:
        switch (flameOn)
        {
            case true:
                iResult = 1;
                break;
            case false:
                iResult = 2;
                break;
        }
        break;
    case false:
        switch (flameOn)
        {
            case false:
                iResult = 3;
                break;
            case true:
                iResult = 4;
                break;
        }
        break;
}
```

What will the variable result be?

- A. 1
- B. 2
- C. 3
- D. 4

Answer: B

Question No : 31 HOTSPOT - (Topic 1)

For each of the following statements, select Yes if the statement is true. Otherwise, select

No. Each correct selection is worth one point.

Answer Area

Description of Behavior	Yes	No
The "is a" relationship between classes refers to composition.	<input type="radio"/>	<input type="radio"/>
The "has a" relationship between classes refers to inheritance.	<input type="radio"/>	<input type="radio"/>
Both composition and inheritance allow you to create sub-objects.	<input type="radio"/>	<input type="radio"/>

Answer:

Answer Area

Description of Behavior	Yes	No
The "is a" relationship between classes refers to composition.	<input type="radio"/>	<input checked="" type="radio"/>
The "has a" relationship between classes refers to inheritance.	<input type="radio"/>	<input checked="" type="radio"/>
Both composition and inheritance allow you to create sub-objects.	<input checked="" type="radio"/>	<input type="radio"/>

Question No : 32 - (Topic 1)

How many parameters can a default constructor have?

A. 0

- B. 1
- C. 2
- D. 3 or more

Answer: A

Explanation: If a class contains no instance constructor declarations, a default instance constructor is automatically provided. That default constructor simply invokes the parameterless constructor of the direct base class.

Question No : 33 - (Topic 1)

You are creating an application that presents users with a graphical interface in which they can enter data. The application must run on computers that do not have network connectivity.

Which type of application should you choose?

- A. Console-based
- B. Windows Forms
- C. Windows Service
- D. ClickOnce

Answer: B

Explanation: Use Windows Forms when a GUI is needed.

Question No : 34 - (Topic 1)

Which of the following must exist to inherit attributes from a particular class?

- A. Public properties
- B. A has-a relationship
- C. An is-a relationship
- D. Static members

Answer: A**Explanation:** There must be some public properties that can be inherited.**Question No : 35 - (Topic 1)**

The elements of an array must be accessed by:

- A. Calling the item that was most recently inserted into the array.
- B. Calling the last item in the memory array.
- C. Using an integer index.
- D. Using a first-in, last-out (FILO) process.

Answer: C**Question No : 36 - (Topic 1)**

What are two methods that can be used to evaluate the condition of a loop at the start of each iteration? (Each correct answer presents a complete solution. Choose two.)

- A. If
- B. Do... While
- C. For
- D. While

Answer: C,D**Explanation:** For and While constructs check at the start of each iteration.**Question No : 37 - (Topic 1)**

You have a class named Truck that inherits from a base class named Vehicle. The Vehicle class includes a protected method named brake ().

How should you call the Truck class implementation of the brake () method?

- A. Vehicle. brake ();
- B. This. brake ();
- C. MyBase. brake();
- D. Truck. brake ();

Answer: C

Explanation: The MyBase keyword behaves like an object variable referring to the base class of the current instance of a class. MyBase is commonly used to access base class members that are overridden or shadowed in a derived class.

Question No : 38 - (Topic 1)

You have a table named ITEMS with the following fields:

- ✍ ID (integer, primary key, auto generated)
- ✍ Description (text)
- ✍ Completed (Boolean)

You need to insert the following data in the table:

"Cheese", False

Which statement should you use?

- A. INSERT INTO ITEMS (ID, Description, Completed) VALUES (1, 'Cheese', 0)
- B. INSERT INTO ITEMS (Description, Completed) VALUES ('Cheese', 1)
- C. INSERT INTO ITEMS (10, Description, Completed) VALUES (NEWID(), 'Cheese', 6)
- D. INSERT INTO ITEMS (Description, Completed) VALUES ('Cheese', 0)

Answer: D

Explanation: The string values TRUE and FALSE can be converted to bit values: TRUE is converted to 1 and FALSE is converted to 0.

Incorrect:

Not A, not C: ID is autogenerated and should not be specified.

Question No : 39 HOTSPOT - (Topic 1)

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Statement	Yes	No
Within an XHTML document, the XHTML DOCTYPE declaration is mandatory.	<input type="radio"/>	<input type="radio"/>
Within an XHTML document, the XML namespace attribute in the html tag is mandatory.	<input type="radio"/>	<input type="radio"/>
Within an XHTML document, the html, head, title, and body tags are mandatory.	<input type="radio"/>	<input type="radio"/>

Answer:**Answer Area**

Statement	Yes	No
Within an XHTML document, the XHTML DOCTYPE declaration is mandatory.	<input checked="" type="checkbox"/>	<input type="radio"/>
Within an XHTML document, the XML namespace attribute in the html tag is mandatory.	<input checked="" type="checkbox"/>	<input type="radio"/>
Within an XHTML document, the html, head, title, and body tags are mandatory.	<input checked="" type="checkbox"/>	<input type="radio"/>

Question No : 40 - (Topic 1)

You need to allow a consumer of a class to modify a private data member.

What should you do?

- A. Assign a value directly to the data member.
- B. Provide a private function that assigns a value to the data member.
- C. Provide a public function that assigns a value to the data member.
- D. Create global variables in the class.

Answer: C

Explanation: In this example (see below), the Employee class contains two private data members, name and salary. As private members, they cannot be accessed except by member methods. Public methods named GetName and Salary are added to allow controlled access to the private members. The name member is accessed by way of a public method, and the salary member is accessed by way of a public read-only property.

Note: The private keyword is a member access modifier. Private access is the least permissive access level. Private members are accessible only within the body of the class or the struct in which they are declared

Example:

```
class Employee2
{
    private string name = "FirstName, LastName";
    private double salary = 100.0;

    public string GetName()
    {
        return name;
    }

    public double Salary
    {
        get { return salary; }
    }
}
```

Question No : 41 - (Topic 1)

You need to create a property in a class. Consumers of the class must be able to read the values of the property. Consumers of the class must be prevented from writing values to the property.

Which property procedure should you include?

- A. Return
- B. Get
- C. Set
- D. Let

Answer: B

Question No : 42 - (Topic 1)

How does a console-based application differ from a Windows Forms application?

- A. Console-based applications require the XNA Framework to run.
- B. Windows Forms applications do not provide a method for user input.
- C. Windows Forms applications can access network resources.
- D. Console-based applications do not display a graphical interface.

Answer: D

Question No : 43 - (Topic 1)

You are creating a database for a student directory. The Students table contains the following fields:

firstName
lastName
emailAddress
telephoneNumber

Which statement will retrieve only the first name, last name, and telephone number for every student listed in the directory?

- A. WHERE Students SELECT *
- B. SELECT firstName, lastName, telephoneNumber FROM Students
- C. SELECT firstName, lastName, telephoneNumber IN Students
- D. SELECT * FROM Students
- E. WHERE Students SELECT firstName, lastName, telephoneNumber

Answer: B

Explanation: Use SELECT...FROM and list the fields you want to retrieve.

Question No : 44 - (Topic 1)

Which programming language is characterized as client-side, dynamic and weakly typed?

- A. JavaScript
- B. HTML
- C. ASP.NET
- D. C#

Answer: A

Explanation: JavaScript is characterized as a dynamic, weakly typed, prototype-based language with first-class functions. It is primarily used in the form of client-side JavaScript for the development of dynamic websites.

Question No : 45 HOTSPOT - (Topic 1)

You are creating a Windows Store application that uses the following gesture:



Use the drop-down menus to select the answer choice that completes each statement.
Each correct selection is worth one point.

Answer Area

The gesture shown in the graphic is called [answer choice].

The surface displayed after the gesture has been completed
is the [answer choice].

Answer Area

The gesture shown in the graphic is called [answer choice].

- ▼
- moving
- pushing
- sliding
- swiping

The surface displayed after the gesture has been completed
is the [answer choice].

- ▼
- app bar
- canvas
- charms
- context menu

Answer:

Answer Area

The gesture shown in the graphic is called [answer choice].

- ▼
- moving
- pushing
- sliding
- swiping

The surface displayed after the gesture has been completed
is the [answer choice].

- ▼
- app bar
- canvas
- charms
- context menu

Question No : 46 - (Topic 1)

You are creating an application that presents users with a graphical interface. Users will run this application from remote computers. Some of the remote computers do not have the .NET Framework installed. Users do not have permissions to install software.

Which type of application should you choose?

- A. Windows Forms
- B. Windows Service
- C. ASP. NET
- D. Console-based

Answer: C

Question No : 47 HOTSPOT - (Topic 1)

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Description of Behavior	Yes	No
A linked list has a maximum of 100 nodes.	<input type="radio"/>	<input type="radio"/>
You can add new nodes anywhere in a linked list.	<input type="radio"/>	<input type="radio"/>
A linked list can be sorted.	<input type="radio"/>	<input type="radio"/>

Answer:

Answer Area

Description of Behavior	Yes	No
A linked list has a maximum of 100 nodes.	<input type="radio"/>	<input checked="" type="radio"/>
You can add new nodes anywhere in a linked list.	<input checked="" type="radio"/>	<input type="radio"/>
A linked list can be sorted.	<input checked="" type="radio"/>	<input type="radio"/>

Question No : 48 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

Arguments are passed to console applications as a Hashtable object.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. String Array
- C. StoredProcedurCollection
- D. Dictionary

Answer: B

Explanation: Arguments are passed to console applications as a String Array object.

Question No : 49 - (Topic 1)

In the application life cycle, the revision of an application after it has been deployed is referred to as:

- A. Unit testing
- B. Integration
- C. Maintenance
- D. Monitoring

Answer: C

Question No : 50 - (Topic 1)

You are developing an application that tracks tennis matches. A match is represented by the following class:

```
public class Match
{
    public Match()
    {
        Location = "unknown";
    }

    public string Location { get; set; }
    public DateTime? MatchDate { get; set; }
}
```

A match is created by using the following code:

```
var match = new Match
{
    Location = "north region",
    MatchDate = new DateTime(2013, 4, 14),
};
```

How many times is the Location property on the newly created Match class assigned?

- A. 0
- B. 1
- C. 2
- D. 3

Answer: C

Question No : 51 - (Topic 1)

Which two types of information should you include in an effective test case? (Choose two.)

- A. the expected result from testing the case
- B. multiple actions combined as a single step to test the case
- C. any pre-conditions necessary to test the case
- D. the stakeholders who originated the test case

Answer: A,B

Explanation: You can create manual test cases using Microsoft Test Manager that have both action and validation test steps. You can also share a set of common test steps between multiple test cases called shared steps. This simplifies maintenance of test steps if your application under test changes.

Question No : 52 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

A piece of text that is 4096 bytes or smaller and is stored on and retrieved from the client computer to maintain state is known as a ViewState.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. cookie
- C. form post
- D. QueryString

Answer: B

Explanation: A piece of text that is 4096 bytes or smaller and is stored on and retrieved from the client computer to maintain state is known as a Cookie.

Question No : 53 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

The duplication of code so that modifications can happen in parallel is known as separating.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. branching
- C. merging
- D. splitting

Answer: B

Explanation: When you develop applications in a team-based environment, you might need to access multiple versions of your application at the same time. If you copy one or more areas of your code into a separate branch, you can update one copy while you preserve the original version, or you can update both branches to meet different needs. Depending on your development goals, you can later merge the changes from multiple branches to create a single version that reflects all changes.

Question No : 54 - (Topic 1)

A table named Student has columns named ID, Name, and Age. An index has been created on the ID column. What advantage does this index provide?

- A. It reorders the records alphabetically.
- B. It speeds up query execution.
- C. It minimizes storage requirements.
- D. It reorders the records numerically.

Answer: B

Explanation: Faster to access an index table.

Question No : 55 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

A data dictionary that describes the structure of a database is called metadata.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. normalization
- C. a database management system (DBMS)
- D. metacontent

Answer: A

Question No : 56 - (Topic 1)

You have a SQL Server database named MyDB that uses SQL Server Authentication.

Which connection string should you use to connect to MyDB?

- A. Data Source=MyDB; UserID=username; Password=P@sswOrd; Initial Catalog=Sales
- B. Data Source=MyDB; Integrated Security=SSPI; Initial Catalog=Sales
- C. Data Source=MyDB; Integrated Security=True; Initial Catalog=Sales
- D. Data Source=MyDB; Trusted_Connection=True; MultipleActiveResultSets=True; Initial Catalog=Sales

Answer: A

Explanation: Integrated Security

Integrated Security is by default set to false.

When false, User ID and Password are specified in the connection.

Incorrect:

not C: Windows Authentication (Integrated Security = true) remains the most secure way to log in to a SQL Server database.

Question No : 57 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

When a base class declares a method as virtual, the method is hidden from implementation by a derived class.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. can be overridden with its own implementation by a derived class
- C. must be overridden in any non-abstract class that directly inherits from that class
- D. cannot be overridden with its own implementation by a derived class

Answer: B

Explanation: The implementation of a non-virtual method is invariant: The implementation is the same whether the method is invoked on an instance of the class in which it is declared or an instance of a derived class. In contrast, the implementation of a virtual method can be superseded by derived classes. The process of superseding the implementation of an inherited virtual method is known as overriding that method.

Question No : 58 - (Topic 1)

When a web service is referenced from a client application in Microsoft Visual Studio, which two items are created? (Choose two.)

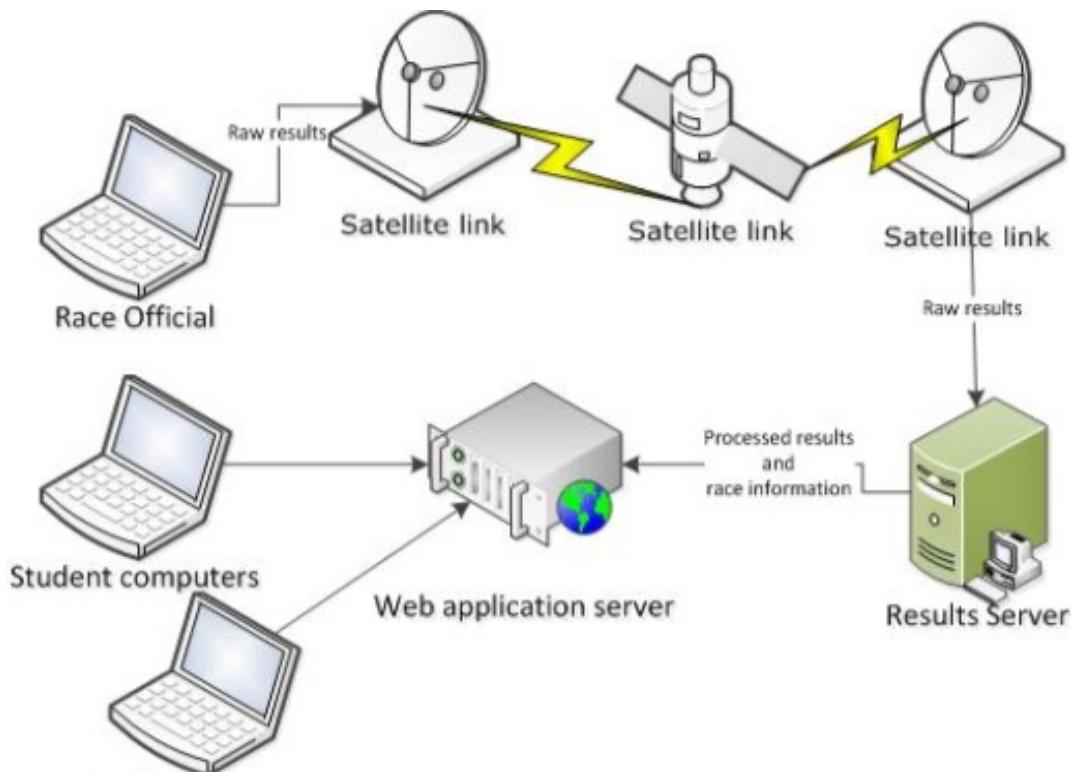
- A. a stub
- B. a.wsdl file
- C. a proxy
- D. a .disco file

Answer: B,D

Explanation: A .wsdl file that references the Web service is created, together with supporting files, such as discovery (.disco and .discomap) files, that include information about where the Web service is located.

Question No : 59 HOTSPOT - (Topic 1)

You are reviewing the architecture for a system that allows race officials to enter the results of 5K race results. The results are then made available to students using a web application. The architecture is shown below:



Use the drop-down menus to select the answer choice that answers each question. Each correct selection is worth one point.

Answer Area

To minimize the time between when a race official records the results and when the results are available on the web, which part of the system is critical?

To increase the number of students that can access race results, what element should be added to the system?

Answer Area

To minimize the time between when a race official records the results and when the results are available on the web, which part of the system is critical?

satellite link
student computer
race official computer
web application server

To increase the number of students that can access race results, what element should be added to the system?

satellite link
race officials
results servers
web application servers

Answer:**Answer Area**

To minimize the time between when a race official records the results and when the results are available on the web, which part of the system is critical?

satellite link	▼
student computer	
race official computer	
web application server	

To increase the number of students that can access race results, what element should be added to the system?

satellite link	▼
race officials	
results servers	
web application servers	

Question No : 60 - (Topic 1)

You need to ensure the data integrity of a database by resolving insertion, update, and deletion anomalies.

Which term is used to describe this process in relational database design?

- A. Isolation
- B. Normalization
- C. Integration
- D. Resolution

Answer: B

Explanation: Database normalization is the process of organizing the fields and tables of a relational database to minimize redundancy. Normalization usually involves dividing large tables into smaller (and less redundant) tables and defining relationships between them. The objective is to isolate data so that additions, deletions, and modifications of a field can be made in just one table and then propagated through the rest of the database using the defined relationships.

Question No : 61 HOTSPOT - (Topic 1)

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area**Test Behavior****Yes****No**

The primary goal of unit testing is to take the smallest piece of testable software in the application, isolate it from the remainder of the code, and determine whether it behaves exactly as expected.

In unit testing, each unit is tested separately before integrating the units into modules to test the interfaces between modules.

The driver that you use in unit testing simulates a calling unit and the stub simulates a called unit.

Answer:**Answer Area****Test Behavior****Yes****No**

The primary goal of unit testing is to take the smallest piece of testable software in the application, isolate it from the remainder of the code, and determine whether it behaves exactly as expected.

In unit testing, each unit is tested separately before integrating the units into modules to test the interfaces between modules.

The driver that you use in unit testing simulates a calling unit and the stub simulates a called unit.

Question No : 62 DRAG DROP - (Topic 1)

You are developing an application to display track and field race results.

The application must display the race results twice. The first time it must display only the winner and runner-up. The second time it must display all participants. The code used to display results is shown below.

```
public void Display()
{
    // display top two
    foreach (var ranking in Rankings(true))
    {

        DisplayName(ranking);
    }

    // display all
    foreach (var ranking in Rankings(false))
    {
        DisplayName(ranking);
    }
}
```

You need to implement the Rankings() function.

Complete the function to meet the requirements. {To answer, drag the appropriate code segment from the column on the left to its location on the right. Each code segment may be used once, more than once, or not at all. Each correct match is worth one point.)

Code Segments	Answer Area
break	
return	
yield break	
yield return	
	private IEnumerable<string> Rankings(bool top20only)
	{
	Code Segment "John";
	Code Segment "Nancy";
	if (top20only)
	Code Segment ;
	Code Segment "Chris";
	}

Answer:

Code Segments

break

return

yield break

yield return

Answer Area

```
private IEnumerable<string> Rankings(bool top20only)
{
    yield return "John";
    yield return "Nancy";
    if (top20only)
        yield break;
    yield return "Chris";
}
```

Question No : 63 - (Topic 1)

You have a stack that contains integer values. The values are pushed onto the stack in the following order: 2,4,6,8.

The following sequence of operations is executed:

Pop

Push 3

Pop

Push 4

Push 6

Push 7

Pop

Pop

Pop

What is the value of the top element after these operations are executed?

A. 2

B. 3

C. 6

D. 7

Answer: B

Question No : 64 - (Topic 1)

You are creating an ASP. NET Web application.

Which line of code should you use to require a control to process on the computer that hosts the application?

- A. defaultRedirect="ServerPage. htm"
- B. redirect="HostPage. htm"
- C. AutoEventWireup="true"
- D. runat="server"

Answer: D

Question No : 65 - (Topic 1)

You are creating an application that presents the user with a Windows Form. You need to configure the application to display a message box to confirm that the user wants to close the form.

Which event should you handle?

- A. Deactivate
- B. Leave
- C. FormClosed
- D. FormClosing

Answer: D

Explanation: The Closing event occurs as the form is being closed.

Question No : 66 - (Topic 1)

You create an application that uses Simple Object Access Protocol (SOAP).

Which technology provides information about the application's functionality to other applications?

- A. Web Service Description Language (WSDL)
- B. Extensible Application Markup Language (XAML)
- C. Common Intermediate Language (CIL)
- D. Universal Description, Discovery, and Integration (UDDI)

Answer: A

Explanation: WSDL is often used in combination with SOAP and an XML Schema to provide Web services over the Internet. A client program connecting to a Web service can read the WSDL file to determine what operations are available on the server. Any special datatypes used are embedded in the WSDL file in the form of XML Schema. The client can then use SOAP to actually call one of the operations listed in the WSDL file using for example XML over HTTP.

Question No : 67 - (Topic 1)

You need to create a stored procedure that passes in a person's name and age.

Which statement should you use to create the stored procedure?

- A. `CREATE PROCEDURE StoreData (@UserName, @Age)`
- B. `CREATE PROCEDURE StoreData
@UserName nvarchar(255),
@Age int`
- C. `CREATE PROCEDURE StoreData
@UserName char,
@Age double`
- D. `UPDATE PROCEDURE StoreData
@UserName nvarchar(255),
@Age int`

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: B

Explanation: Example (nvarchar and int are best here):

The following example creates a stored procedure that returns information for a specific employee by passing values for the employee's first name and last name. This procedure accepts only exact matches for the parameters passed.

```
CREATE PROCEDURE HumanResources.uspGetEmployees  
@LastName nvarchar(50),  
@FirstName nvarchar(50)  
AS
```

```
SET NOCOUNT ON;  
SELECT FirstName, LastName, JobTitle, Department  
FROM HumanResources.vEmployeeDepartment  
WHERE FirstName = @FirstName AND LastName = @LastName;  
GO
```

Question No : 68 - (Topic 1)

What are two possible options for representing a Web application within Internet Information Services (IIS)? (Each correct answer presents a complete solution. Choose two.)

- A. Web site
- B. Web directory
- C. Virtual directory
- D. Application server
- E. Application directory

Answer: A,C

Explanation: * Create a Web Application

An application is a grouping of content at the root level of a Web site or a grouping of content in a separate folder under the Web site's root directory. When you add an

application in IIS 7, you designate a directory as the application root, or starting point, for the application and then specify properties specific to that particular application, such as the application pool that the application will run in.

- * You can make an Existing Virtual Directory a Web Application.

Question No : 69 - (Topic 1)

You are creating a Web application. The application will be consumed by client computers that run a variety of Web browsers.

Which term is used to describe the process of making the application available for client computers to access?

- A. Casting
- B. Deploying
- C. Hosting
- D. Virtualization

Answer: C

Explanation: You host web applications.

Question No : 70 - (Topic 1)

Which type of application has the following characteristics when it is installed?

- ✓ Runs continuously in the background by default when the startup type is set to automatic
- ✓ Presents no user interface

- A. Windows Service
- B. Windows Forms
- C. Console-based
- D. Batch file

Answer: A

Explanation: A Windows service runs in the background and has no interface.

Question No : 71 HOTSPOT - (Topic 1)

You have a base class named Tree with a friend property named color and a protected property named NumberOfLeaves. In the same project, you also have a class named Person.

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Description of Behavior	Yes	No
Methods in the Person class can access the color property.	<input type="radio"/>	<input type="radio"/>
Methods in the Person class can access the NumberOfLeaves property.	<input type="radio"/>	<input type="radio"/>
Methods in the Tree class can access all private properties in Person.	<input type="radio"/>	<input type="radio"/>

Answer:

Answer Area

Description of Behavior	Yes	No
Methods in the Person class can access the color property.	<input checked="" type="radio"/>	<input type="radio"/>
Methods in the Person class can access the NumberOfLeaves property.	<input type="radio"/>	<input checked="" type="radio"/>
Methods in the Tree class can access all private properties in Person.	<input type="radio"/>	<input checked="" type="radio"/>

Question No : 72 - (Topic 1)

How should you configure an application to consume a Web service?

- A. Add the Web service to the development computer.
- B. Add a reference to the Web service in the application.
- C. Add a reference to the application in the Web service.
- D. Add the Web service code to the application.

Answer: B

Explanation: Start by adding a Service Reference to the project. Right-click the ConsoleApplication1 project and choose “Add Service Reference”:

Question No : 73 - (Topic 1)

Which three items are benefits of encapsulation? (Choose three.)

- A. maintainability
- B. flexibility
- C. restricted access
- D. inheritance
- E. performance

Answer: A,B,C

Explanation: Encapsulation is the packing of data and functions into a single component. In programming languages, encapsulation is used to refer to one of two related but distinct notions, and sometimes to the combination thereof:

- * A language mechanism for restricting access to some of the object's components.
- * A language construct that facilitates the bundling of data with the methods (or other functions) operating on that data.

Incorrect:

not D: Encapsulation is one of the four fundamental OOP concepts. The other three are inheritance, polymorphism, and abstraction.

Question No : 74 - (Topic 1)

What is displayed when you attempt to access a Web service by using a Web browser?

- A. a listing of methods that are available in the Web service
- B. a directory listing of the Web service's application structure
- C. an error page explaining that you have accessed the Web service incorrectly
- D. a visual depiction of your preliminary connection to the Web service

Answer: A

Explanation: The server, in response to this request, displays the Web service's HTML description page.

The Web service's HTML description page shows you all the Web service methods supported by a particular Web service. Link to the desired Web service method and enter the necessary parameters to test the method and see the XML response.

Question No : 75 DRAG DROP - (Topic 1)

You are developing an application that displays a list of race results. The race results are stored in the following class:

```
public class RaceSpeedRecord
{
    public RaceSpeedRecord Faster;
    public RaceSpeedRecord Slower;

    public string Race;
    public double Time;
}
```

The code that manages the list is as follows:

```
public class Results
{
    public Results()
    {
        CurrentOlympicRecord = new RaceSpeedRecord();
    }

    public RaceSpeedRecord CurrentOlympicRecord;

    public void AddRace(string raceName, double time)
    {
    }
}
```

You need to implement the Add Race method.

Match the code segment to its location. (To answer, drag the appropriate code segment from the column on the left to its location on the right. Each code segment may be used once, more than once, or not at all. Each correct match is worth one point.)

Code Segments

current.Faster
current.Slower
current.Time
current.Race

Answer Area

```
public void AddRace(string raceName, double time)
{
    var current = CurrentOlympicRecord;

    while (     > time)
        current =  ;

    var race = new RaceSpeedRecord
    {
        Race = raceName,
        Time = time,

        Faster = 
        Slower = 
    }

    current.Faster.Slower = race;
    current.Slower.Faster = race;
}
```

Answer:**Code Segments**

current.Faster
current.Slower
current.Time
current.Race

Answer Area

```
public void AddRace(string raceName, double time)
{
    var current = CurrentOlympicRecord;

    while (     > time)
        current =  ;

    var race = new RaceSpeedRecord
    {
        Race = raceName,
        Time = time,

        Faster =  current.Faster
        Slower =  current.Slower
    }

    current.Faster.Slower = race;
    current.Slower.Faster = race;
}
```

Question No : 76 HOTSPOT - (Topic 1)

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Description of Behavior	Yes	No
An entity relationship diagram (ERD) is designed for an object-oriented database.	<input type="radio"/>	<input type="radio"/>
An entity relationship diagram (ERD) contains entities, relationships, and attributes.	<input type="radio"/>	<input type="radio"/>
Cardinality refers to how one table is linked to another table; as one-to-many.	<input type="radio"/>	<input type="radio"/>

Answer:**Answer Area**

Description of Behavior	Yes	No
An entity relationship diagram (ERD) is designed for an object-oriented database.	<input type="radio"/>	<input checked="" type="radio"/>
An entity relationship diagram (ERD) contains entities, relationships, and attributes.	<input checked="" type="radio"/>	<input type="radio"/>
Cardinality refers to how one table is linked to another table; as one-to-many.	<input checked="" type="radio"/>	<input type="radio"/>

Question No : 77 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

Converting a value type to a reference type in an object is called boxing.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. unboxing

- C. interfacing
- D. mapping

Answer: A

Explanation: Boxing is an implicit conversion of a Value Types (C# Reference) to the type object or to any interface type implemented by this value type.

Question No : 78 - (Topic 1)

A class named Manager is derived from a parent class named Employee. The Manager class includes characteristics that are unique to managers.

Which term is used to describe this object-oriented concept?

- A. Encapsulation
- B. Data modeling
- C. Inheritance
- D. Data hiding

Answer: C

Explanation: Classes (but not structs) support the concept of inheritance. A class that derives from another class (the base class) automatically contains all the public, protected, and internal members of the base class except its constructors and destructors.

Incorrect:

not A: *Encapsulation* is sometimes referred to as the first pillar or principle of object-oriented programming. According to the principle of encapsulation, a class or struct can specify how accessible each of its members is to code outside of the class or struct. Methods and variables that are not intended to be used from outside of the class or assembly can be hidden to limit the potential for coding errors or malicious exploits.

Question No : 79 - (Topic 1)

You need to evaluate the following expression:

(A>B) AND (C<D)

What is the value of this expression if A=3, B=4, C=4, and D=5?

- A. 0
- B. 4
- C. 5
- D. False
- E. Null
- F. True

Answer: D

Explanation: A>B is false.

Question No : 80 - (Topic 1)

Which term is used to describe small units of text that are stored on a client computer and retrieved to maintain state?

- A. trace
- B. cookie
- C. server transfer
- D. cross-page post

Answer: B

Explanation: HTTP is a stateless protocol. This means that user data is not persisted from one Web page to the next in a Web site. One way to maintain state is through the use of cookies. Cookies store a set of user specific information, such as a reference identifier for a database record that holds customer information.

Question No : 81 - (Topic 1)

Which function does Simple Object Access Protocol (SOAP) provide when using Web services?

- A. directory of registered Web services
- B. communications protocol
- C. security model
- D. model for describing Web services

Answer: B

Explanation: SOAP, originally defined as Simple Object Access Protocol, is a protocol specification for exchanging structured information in the implementation of web services in computer networks. It relies on XML Information Set for its message format, and usually relies on other application layer protocols, most notably Hypertext Transfer Protocol (HTTP) or Simple Mail Transfer Protocol (SMTP), for message negotiation and transmission.

Question No : 82 - (Topic 1)

Your application must pull data from a database that resides on a separate server.

Which action must you perform before your application can retrieve the data?

- A. Configure the network routers to allow database connections.
- B. Install the database on each client computer.
- C. Create a routine that bypasses firewalls by using Windows Management Instrumentation (WMI).
- D. Establish a connection to the database by using the appropriate data provider.

Answer: D**Question No : 83 - (Topic 1)**

You are creating an application for a help desk center. Calls must be handled in the same order in which they were received.

Which data structure should you use?

- A. Binary tree

- B. Stack
- C. Hashtable
- D. Queue

Answer: D

Explanation: A queue keeps the order of the items.

Question No : 84 - (Topic 1)

Which term is used to describe a class that inherits functionality from an existing class?

- A. Base class
- B. Inherited class
- C. Derived class
- D. Superclass

Answer: C

Explanation: Classes (but not structs) support the concept of inheritance. A class that derives from another class (the *base class*) automatically contains all the public, protected, and internal members of the base class except its constructors and destructors.

Question No : 85 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

The benefit of using a transaction when updating multiple tables is that the update cannot fail.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. succeeds or fails as a unit
- C. finishes as quickly as possible
- D. can be completed concurrently with other transactions

Answer: B

Explanation: The benefit of using a transaction when updating multiple tables is that the update succeeds or fails as a unit.

Question No : 86 - (Topic 1)

You run the following code:

```
int a = 10;
int b = 20;
int c = 30;
int result = 0;

if (a <= b || c > a)
    result = 10;
else if (a <= b || c <= a)
    result = 20;
else
    result = 30;
```

What is the value of result when the code has completed?

- A. 0
- B. 10
- C. 20
- D. 30

Answer: B

Explanation: The conditional-OR operator (||) performs a logical-OR of its bool operands. If the first operand evaluates to true, the second operand isn't evaluated. If the first operand evaluates to false, the second operator determines whether the OR expression as a whole evaluates to true or false.

Question No : 87 - (Topic 1)

The Dog class and the Cat class inherit from the Animal class. The Animal class includes a breathe() method and a speak() method. If the speak() method is called from an object of type Dog, the result is a bark. If the speak() method is called from an object of type Cat, the result is a meow.

Which term is used to describe this object-oriented concept?

- A. multiple inheritance
- B. polymorphism
- C. data hiding
- D. encapsulation

Answer: A

Explanation: Polymorphism is often referred to as the third pillar of object-oriented programming, after encapsulation and inheritance. Polymorphism is a Greek word that means "many-shaped" and it has two distinct aspects:

- * At run time, objects of a derived class may be treated as objects of a base class in places such as method parameters and collections or arrays. When this occurs, the object's declared type is no longer identical to its run-time type.
- * Base classes may define and implement virtual methods, and derived classes can override them, which means they provide their own definition and implementation. At run-time, when client code calls the method, the CLR looks up the run-time type of the object, and invokes that override of the virtual method. Thus in your source code you can call a method on a base class, and cause a derived class's version of the method to be executed.

Question No : 88 - (Topic 1)

Which language uses Data Definition Language (DDL) and Data Manipulation Language (DML)?

- A. SQL
- B. C++
- C. Pascal
- D. Java

Answer: A

Explanation: SQL uses DDL and DML.

Question No : 89 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

A table whose attributes depend only on the primary key must be at least second normal form.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A.** No change is needed
- B.** first
- C.** third
- D.** fourth

Answer: A

Explanation: 2nd Normal Form Definition

A database is in second normal form if it satisfies the following conditions:

It is in first normal form

All non-key attributes are fully functional dependent on the primary key

Question No : 90 - (Topic 1)

In this XHTML code sample, what will cause an error?

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
  <head>
    <title>The Title</title>
  </head>
  <body>
    <h1>This is a Heading.</h1>
    <p>This is a paragraph</p><br>
  </body>
</html>
```

- A. All tags are not in uppercase.
- B. The body tag is missing a background attribute.
- C. The line break tag is incorrectly formatted.
- D. The HTML tags do not read XHTML.

Answer: C

Explanation: In XHTML, the
 tag must be properly closed, like this:
.

Question No : 91 - (Topic 1)

What are the three basic states that a Windows service can be in? (Choose three.)

- A. halted
- B. running
- C. stopped
- D. paused
- E. starting

Answer: B,C,D

Explanation: A service can exist in one of three basic states: Running, Paused, or Stopped.

Question No : 92 - (Topic 1)

You are designing a class for an application. You need to restrict the availability of the member variable accessCount to the base class and to any classes that are derived from the base class.

Which access modifier should you use?

- A. Internal
- B. Protected
- C. Private
- D. Public

Answer: C

Question No : 93 - (Topic 1)

You are creating an application for computers that run Windows XP or later. This application must run after the computer starts. The user must not be aware that the application is running.

The application performs tasks that require permissions that the logged-in user does not have.

Which type of application allows this behavior?

- A. Windows Service application
- B. Windows Forms application
- C. DOS batch file
- D. Terminate-and-stay-resident (TSR) program

Answer: A

Question No : 94 - (Topic 1)

Which type of function can a derived class override?

- A. a non-virtual public member function
- B. a private virtual function
- C. a protected virtual member function
- D. a static function

Answer: C

Explanation: You can override virtual functions defined in a base class from the Visual Studio.

The **override** modifier is required to extend or modify the abstract or virtual implementation of an inherited method, property, indexer, or event.

Question No : 95 - (Topic 1)

Two classes named Circle and Square inherit from the Shape class. Circle and Square both inherit Area from the Shape class, but each computes Area differently.

Which term is used to describe this object-oriented concept?

- A. polymorphism
- B. encapsulation
- C. superclassing
- D. overloading

Answer: A

Explanation: You can use polymorphism to in two basic steps:

Create a class hierarchy in which each specific shape class derives from a common base class.

Use a virtual method to invoke the appropriate method on any derived class through a single call to the base class method.

Question No : 96 - (Topic 1)

You have a Microsoft ASP.NET web application.

You need to store a value that can be shared across users on the server.

Which type of state management should you use?

- A. Session
- B. ViewState
- C. Application
- D. Cookies

Answer: C

Explanation: Application state is a data repository available to all classes in an ASP.NET application. Application state is stored in memory on the server and is faster than storing and retrieving information in a database. Unlike session state, which is specific to a single user session, application state applies to all users and sessions. Therefore, application state is a useful place to store small amounts of often-used data that does not change from

one user to another.

Incorrect:

not A: Session State contains information that is pertaining to a specific session (by a particular client/browser/machine) with the server. It's a way to track what the user is doing on the site.. across multiple pages...amid the statelessness of the Web. e.g. the contents of a particular user's shopping cart is session data. Cookies can be used for session state.
Not B: Viewstate is a state management technique in asp.net. ASP.NET Viewstate is preserving the data between the requests or postbacks and stored in hidden fields on the page.

Question No : 97 - (Topic 1)

You have a class with a property.

You need to ensure that consumers of the class can write to the value of the property.

Which keyword should you use?

- A. value
- B. add
- C. get
- D. set

Answer: D

Explanation: Set:

The set {} implementation receives the implicit argument "value." This is the value to which the property is assigned.

* Property. On a class, a property gets and sets values. A simplified syntax form, properties are implemented in the IL as methods (get, set).

Question No : 98 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

Internet Information Services (IIS) must be installed on the client computers in order to run a deployed ASP.NET application.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. computer that hosts the application
- C. computer that you plan to deploy from
- D. Application Layer Gateway Service

Answer: B

Explanation: Internet Information Services (IIS) must be installed on computer that hosts the application in order to run a deployed ASP.NET application.

Question No : 99 - (Topic 1)

The purpose of a constructor in a class is to:

- A. Initialize an object of that class.
- B. Release the resources that the class holds.
- C. Create a value type.
- D. Inherit from the base class.

Answer: A

Explanation: Each value type has an implicit default constructor that initializes the default value of that type.

Question No : 100 - (Topic 1)

You have a Windows Service running in the context of an account that acts as a non-privileged user on the local computer. The account presents anonymous credentials to any remote server.

What is the security context of the Windows Service?

- A. LocalSystem
- B. User
- C. NetworkService
- D. LocalService

Answer: D

Explanation: LocalService , which runs in the context of an account that acts as a non-privileged user on the local computer, and presents anonymous credentials to any remote server;

Question No : 101 - (Topic 1)

You are creating an application that accepts input and displays a response to the user. You cannot create a graphical interface for this application.

Which type of application should you create?

- A. Windows Forms
- B. Windows Service
- C. Web-based
- D. Console-based

Answer: C

Question No : 102 - (Topic 1)

You are developing a webpage that enables students to manage races.

The webpage will display two lists: past races and upcoming races. The page also contains a sidebar with contact information and a panel with social media settings that can be edited. Race results can be shared on social media.

How many components will be on the webpage?

- A. 2
- B. 3
- C. 4
- D. 5

Answer: C

Question No : 103 - (Topic 1)

What does the Console.Error property do within a console-based application?

- A. sets the standard error input stream
- B. gets the standard error output stream
- C. gets the standard error input stream
- D. sets the standard error output stream

Answer: B

Explanation: The Console.Error property gets the standard error output stream.

Question No : 104 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

Converting an object to a more general type is called upcasting.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. downcasting
- C. interfacing
- D. flexing

Answer: A

Explanation: Casting up a hierarchy means casting from a derived object reference to a base object reference.

Question No : 105 - (Topic 1)

You are writing a Web application that processes room reservation requests. You need to verify that the room that a guest has selected is not already reserved by another guest.

Which type of programming should you use to determine whether the room is still available when the request is made?

- A. functional
- B. dynamic
- C. in-browser
- D. server-side

Answer: D

Question No : 106 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

The process of transforming compiled C# code into an XML string for a web service is known as deserialization.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. serialization
- C. decoding
- D. encoding

Answer: B

Explanation: Serialization is the process of converting an object into a stream of bytes in order to store the object or transmit it to memory, a database, or a file. Its main purpose is to save the state of an object in order to be able to recreate it when needed.

Serialization allows the developer to save the state of an object and recreate it as needed, providing storage of objects as well as data exchange. Through serialization, a developer

can perform actions like sending the object to a remote application by means of a Web Service, passing an object from one domain to another, passing an object through a firewall as an XML string, or maintaining security or user-specific information across applications.

Question No : 107 - (Topic 1)

In which order do the typical phases of the Software Development Life Cycle occur?

- A. Development, design, requirements gathering, and testing
- B. Design, requirements gathering, development, and testing
- C. Design, development, requirements gathering, and testing
- D. Requirements gathering, design, development, and testing

Answer: D

Question No : 108 - (Topic 1)

You execute the following code.

```
bool beakerFull = true;
bool flameOn = false;
int iResult = 0;
if(beakerFull)
{
    if(flameOn)
    {
        iResult = 1;
    }
    else
    {
        iResult = 2;
    }
}
else
{
    iResult = 3;
}
```

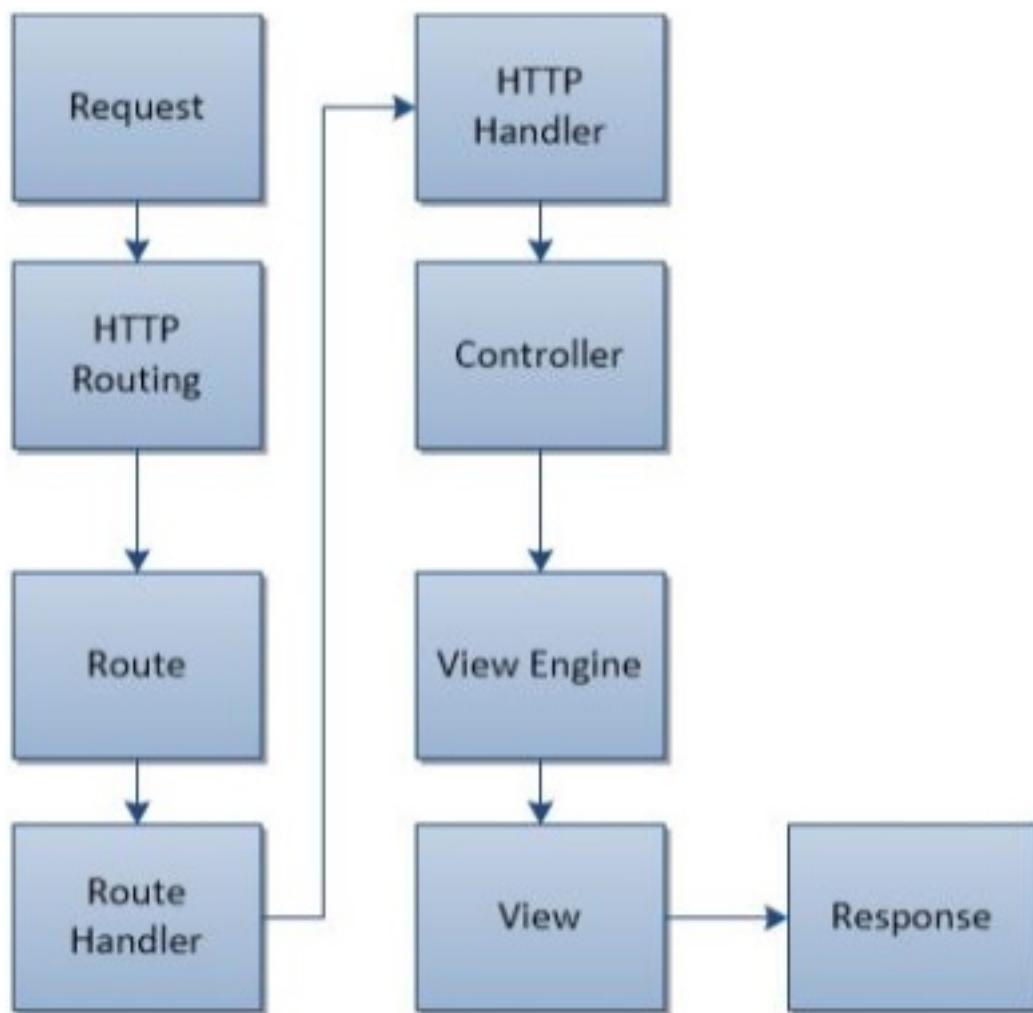
What will the variable result be?

- A. 0
- B. 1
- C. 2
- D. 3

Answer: C

Question No : 109 HOTSPOT - (Topic 1)

The ASP.NET MVC page lifecycle is shown in the following graphic:



Use the drop-down menus to select the answer choice that completes each statement
Each correct selection is worth one point.

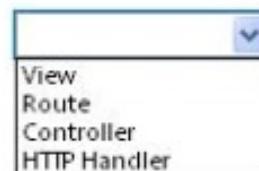
Answer Area

The [answer choice] event determines which action method is needed and then calls that method.

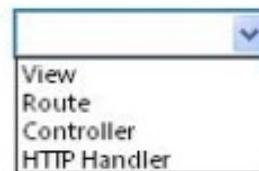
The URL pattern is matched during the [answer choice] event.

Answer Area

The **[answer choice]** event determines which action method is needed and then calls that method.



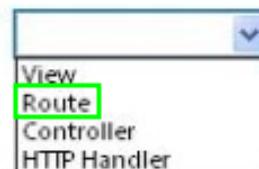
The URL pattern is matched during the **[answer choice]** event.

**Answer:****Answer Area**

The **[answer choice]** event determines which action method is needed and then calls that method.



The URL pattern is matched during the **[answer choice]** event.

**Question No : 110 - (Topic 1)**

You are creating an application that presents the user with a Windows Form.

Which event is triggered each time the Windows Form receives focus?

- A. Enter
- B. Paint
- C. Load
- D. Activated

Answer: A

Explanation: When you change the focus by using the mouse or by calling the Focus method, focus events of the Control class occur in the following order:

Enter

GotFocus

LostFocus

Leave

Validating

Validated

Question No : 111 - (Topic 1)

You need to create an application that processes data on a last-in, first-out (LIFO) basis.

Which data structure should you use?

- A. Queue
- B. Tree
- C. Stack
- D. Array

Answer: C

Explanation: A stack implements LIFO.

Question No : 112 - (Topic 1)

You are creating an application for a priority help desk center. The most recent call must be handled first.

Which data structure should you use?

- A. queue
- B. hashtable
- C. stack
- D. binary tree

Answer: C

Explanation: In computer science, a stack is a particular kind of abstract data type or

collection in which the principal (or only) operations on the collection are the addition of an entity to the collection, known as push and removal of an entity, known as pop. The relation between the push and pop operations is such that the stack is a Last-In-First-Out (LIFO) data structure. In a LIFO data structure, the last element added to the structure must be the first one to be removed.

Question No : 113 HOTSPOT - (Topic 1)

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Description of Behavior	Yes	No
A queue's items are stored in the order they were added.	<input type="radio"/>	<input type="radio"/>
A queue is a first in, first out (FIFO) data structure.	<input type="radio"/>	<input type="radio"/>
A queue has a limited number of items.	<input type="radio"/>	<input type="radio"/>

Answer:

Answer Area

Description of Behavior	Yes	No
A queue's items are stored in the order they were added.	<input checked="" type="radio"/>	<input type="radio"/>
A queue is a first in, first out (FIFO) data structure.	<input checked="" type="radio"/>	<input type="radio"/>
A queue has a limited number of items.	<input type="radio"/>	<input checked="" type="radio"/>

Question No : 114 - (Topic 1)

What are two advantages of normalization in a database? (Choose two)

- A. prevents data inconsistencies
- B. reduces schema limitations
- C. minimizes impact of data corruption
- D. decreases space used on disk

Answer: A,D

Question No : 115 - (Topic 1)

You need to group all the style settings into a separate file that can be applied to all the pages in a Web application.

What should you do?

- A. Use a Cascading Style Sheet (CSS).
- B. Use inline styles.
- C. Use an Extensible Markup Language (XML) schema.
- D. Use a WebKit.

Answer: A

Explanation: Cascading Style Sheets (CSS) is a style sheet language used for describing the look and formatting of a document written in a markup language. CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colors, and fonts.

Question No : 116 - (Topic 1)

Which three are valid SQL keywords? (Choose three.)

- A. GET
- B. WHAT
- C. FROM
- D. SELECT
- E. WHERE

Answer: C,D,E

Explanation: Example:

```
SELECT * FROM Customers  
WHERE Country='Mexico';
```

Question No : 117 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

The bubble sort algorithm steps through the list to be sorted, comparing adjacent items and swapping them if they are in the wrong order

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. merge
- C. library
- D. insertion

Answer: A

Question No : 118 - (Topic 1)

Where must Internet Information Services (IIS) be installed in order to run a deployed ASP.NET application?

- A. on the computer that you plan to deploy from
- B. on the computer that hosts the application
- C. on the Application Layer Gateway Service
- D. on the client computers

Answer: B

Explanation: IIS is run on the web server. The web server is hosting the application.

Question No : 119 - (Topic 1)

You have a server that limits the number of data connections.

What should you use to optimize connectivity when the number of users exceeds the number of available connections?

- A. Connection timeouts
- B. Named pipes
- C. Normalization
- D. Connection pooling

Answer: D

Explanation: In software engineering, a connection pool is a cache of database connections maintained so that the connections can be reused when future requests to the database are required.

Question No : 120 - (Topic 1)

Which service can host an ASP.NET application?

- A. Internet Information Services
- B. Cluster Services
- C. Remote Desktop Services
- D. Web Services

Answer: A

Explanation: Using Internet Information Services (IIS) Manager, you can create a local Web site for hosting an ASP.NET Web application.

Question No : 121 - (Topic 1)

You execute the following code.

```
for(int i = 0; i <= 10; i+= 2)
{
    Console.WriteLine("Hello");
}
```

How many times will the word Hello be printed?

- A. 5
- B. 6
- C. 10
- D. 12

Answer: B

Question No : 122 - (Topic 1)

Which type of Windows application presents a parent window that contains child windows?

- A. Application programming interface (API)
- B. Single-document interface (SDI)

- C. Multiple-document interface (MDI)
- D. Command-line interface (CLI)

Answer: C

Explanation: A multiple document interface (MDI) is a graphical user interface in which multiple windows reside under a single parent window. Such systems often allow child windows to embed other windows inside them as well, creating complex nested hierarchies. This contrasts with single document interfaces (SDI) where all windows are independent of each other.

Question No : 123 - (Topic 1)

An application presents the user with a graphical interface. The interface includes buttons that the user clicks to perform tasks. Each time the user clicks a button, a method is called that corresponds to that button.

Which term is used to describe this programming model?

- A. Functional
- B. Service oriented
- C. Structured
- D. Event driven

Answer: D**Question No : 124 - (Topic 1)**

You have a website that includes a form for username and password.

You need to ensure that users enter their username and password. The validation must work in all browsers.

Where should you put the validation control?

- A. in both the client-side code and the server-side code
- B. in the client-side code only
- C. in the Web.config file

- D. in the server-side code only

Answer: A

Explanation: From version 2.0 on, ASP.NET recognized the JavaScript capabilities of these browsers, so client-side validation is now available to all modern browsers, including Opera, Firefox, and others. Support is even better now in ASP.NET 4.0. That said, it's important not to forget that JavaScript can be disabled in any browser, so client-side validation cannot be relied upon—we must always validate any submitted data on the server.

Question No : 125 - (Topic 1)

You have a class named Glass that inherits from a base class named Window. The Window class includes a protected method named break().

How should you call the Glass class implementation of the break() method?

- A. Window.break();
- B. Glass.break();
- C. this.break();
- D. base.break();

Answer: A**Question No : 126 - (Topic 1)**

In the life cycle of an ASP. NET Web page, which phase follows the SaveStateComplete phase?

- A. PostBack
- B. PostInit
- C. Load
- D. Render

Answer: D

Explanation: The SaveStateComplete event is raised after the view state and control state of the page and controls on the page are saved to the persistence medium.

This is the last event raised before the page is rendered to the requesting browser.

Question No : 127 - (Topic 1)

You are migrating several HTML pages to your website. Many of these pages contain HTML <center> and tags. Which XHTML document type declaration should you use?

- A. `<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">`
- B. `<!DOCTYPE html>`
- C. `<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Frameset//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-frameset.dtd">`
- D. `<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">`

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: A

Explanation: The <!DOCTYPE> declaration is not an HTML tag; it is an instruction to the web browser about what version of HTML the page is written in.

XHTML 1.0 Transitional

This DTD contains all HTML elements and attributes, INCLUDING presentational and deprecated elements (like font). Framesets are not allowed. The markup must also be written as well-formed XML.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

Question No : 128 - (Topic 1)

A data warehouse database is designed to:

- A. Enable business decisions by collecting, consolidating, and organizing data.
- B. Support a large number of concurrent users.
- C. Support real-time business operations.
- D. Require validation of incoming data during real-time business transactions.

Answer: A

Question No : 129 - (Topic 1)

You create an object of type ANumber. The class is defined as follows.

```
public Class ANumber
{
    private int _number = 7;

    public ANumber()
    {
    }

    public ANumber(int number)
    {
        _number = number;
    }
}
```

The code is executed as follows.

```
ANumber mynumber = new ANumber(3);
```

What is the value of _number after the code is executed?

- A. Null
- B. 0
- C. 3
- D. 7

Answer: C

Question No : 130 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

The default entry point for a console application is the Class method.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. Main
- C. Program
- D. Object

Answer: B

Explanation: The default entry point for a console application is the Class Main.

Question No : 131 - (Topic 1)

This question requires that you evaluate the underlined text to determine if it is correct.

To minimize the amount of storage used on the hard drive by an application that generates many small files, you should make the partition as small as possible.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. file allocation table
- C. block size
- D. folder and file names

Answer: C

Question No : 132 - (Topic 1)

In your student directory database, the Students table contains the following fields:

firstName

lastName

emailAddress

telephoneNumtoer

You need to retrieve the data from the firstName, lastName, and emailAddress fields for all students listed in the directory. The results must be in alphabetical order according to lastName and then firstName.

Which statement should you use?

- A.

```
SELECT firstName, lastName, emailAddress
      FROM Students
      ORDER BY lastName, firstName
```

 - B.

```
SELECT firstName, lastName, emailAddress
      FROM Students
      SORT BY lastName, firstName
```

 - C.

```
SELECT firstName, lastName
      FROM Students
      ORDER BY lastName, firstName, emailAddress
```

 - D.

```
SELECT firstName, lastName, emailAddress
      FROM Students BY lastName, firstName
```
- A. Option A
B. Option B
C. Option C
D. Option D

Answer: A

Explanation: to sort use: ORDER BY LastName, FirstName

Question No : 133 - (Topic 1)

The following functions are defined:

```
private static int Printer(int j)
{
    for (var i = j; i > 0; i = Printer(i - 1))
    {
        Console.Write(i);
    }
    return j;
}
```

What does the console display after the following line?

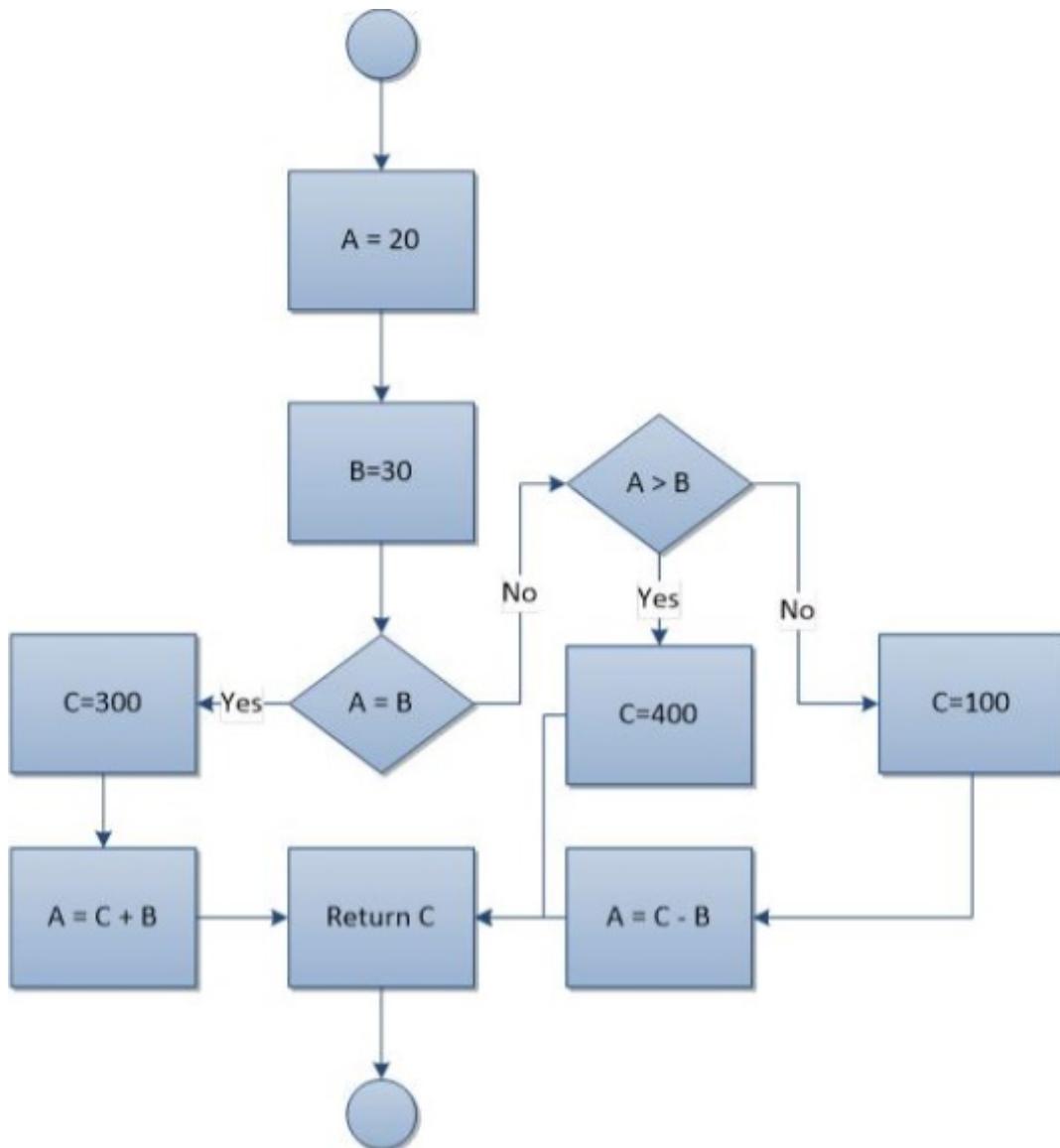
Printer(2);

- A. 210
- B. 211
- C. 2101
- D. 2121

Answer: B

Question No : 134 HOTSPOT - (Topic 1)

You have the following flowchart:



Use the drop-down menus to select the answer choice that completes each statement
Each correct selection is worth one point.

Answer Area

The value that is returned is [answer choice].

The value of A is [answer choice].

Answer Area

The value that is returned is [answer choice].

A dropdown menu containing the following options:
20
100
300
400

The value of A is [answer choice].

A dropdown menu containing the following options:
20
30
70
330

Answer:**Answer Area**

The value that is returned is [answer choice].

A dropdown menu containing the following options:
20
100
300
400

The value of A is [answer choice].

A dropdown menu containing the following options:
20
30
70
330

Question No : 135 - (Topic 1)

The purpose of the Finally section in an exception handler is to:

- A. Execute code regardless of whether an exception is thrown.
- B. Conclude the execution of the application.
- C. Execute code only when an exception is thrown.
- D. Break out of the error handler.

Answer: A

Explanation: By using a finally block, you can clean up any resources that are allocated in a try block, and you can run code even if an exception occurs in the try block. Typically, the statements of a finally block run when control leaves a try statement. The transfer of control can occur as a result of normal execution, of execution of a break, continue, goto, or return

statement, or of propagation of an exception out of the try statement.

Question No : 136 DRAG DROP - (Topic 1)

You are extending an application that stores and displays the results of various types of foot races. The application contains the following definitions:

```
public interface IDisplayResult
{
    void Display();
}

public class Race
{
    public int Seconds;

    public virtual void Display()
    {
        Console.WriteLine(Seconds);
    }
}
```

The following code is used to display the result for a race:

```
var r1 = new FootRace();
var r2 = r1 as IDisplayResult;
r1.Seconds = 99;

r1.Display();
r2.Display();
r1.DisplayRaw();
```

The contents of the console must be as follows:

- ✓ 99 seconds
- ✓ 1.65 minutes
- ✓ 99

You need to implement the FootRace class.

Match the method declaration to the method body, (To answer, drag the appropriate declaration from the column on the left to its body on the right. Each declaration may be used once, more than once, or not at all. Each correct match is worth one point.)

Code Segments

```
public override void Display()
public void DisplayRaw()
void IDisplayResult.Display()
private void Display()
```

Answer Area

```
public class FootRace : Race, IDisplayResult
{
    public override void Display()
    {
        Console.WriteLine(Seconds + " seconds");
    }

    public void DisplayRaw()
    {
        base.Display();
    }

    void IDisplayResult.Display()
    {
        Console.WriteLine(Seconds / 60d + " minutes");
    }
}
```

Answer:**Code Segments**

```
public override void Display()
public void DisplayRaw()
void IDisplayResult.Display()
private void Display()
```

Answer Area

```
public class FootRace : Race, IDisplayResult
{
    public override void Display()
    {
        Console.WriteLine(Seconds + " seconds");
    }

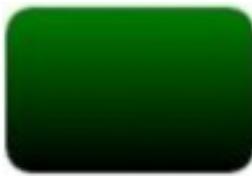
    [public void DisplayRaw()]
    {
        base.Display();
    }

    [void IDisplayResult.Display()]
    {
        Console.WriteLine(Seconds / 60d + " minutes");
    }
}
```

Question No : 137 HOTSPOT - (Topic 1)

You are developing a web application.

You need to create the following graphic by using Cascading Style Sheets (CSS):



Use the drop-down menus to select the answer choice that completes each statement.
Each correct selection is worth one point.

Answer Area

For the CSS Style **background-image**, you should use the value
[answer choice]

For the CSS Style **border-radius**, you
should use the value **[answer choice]**

Answer Area

For the CSS Style **background-image**, you should use the value
[answer choice]

linear-gradient(to top, green, black);
linear-gradient(to bottom, green, black);
radial-gradient(green, black);
repeating-linear-gradient(green, black);

For the CSS Style **border-radius**, you
should use the value **[answer choice]**

10px;
10px, 10px, 10px;
inherit;
initial;

Answer:

Answer Area

For the CSS Style **background-image**, you should use the value
[answer choice]

linear-gradient(to top, green, black);
linear-gradient(to bottom, green, black);
radial-gradient(green, black);
repeating-linear-gradient(green, black);

For the CSS Style **border-radius**, you
should use the value **[answer choice]**

10px;
10px, 10px, 10px;
inherit;
initial;

Topic 2, VB

Question No : 138 - (Topic 2)

You need to group all the style settings into a separate file that can be applied to all the pages in a Web application.

What should you do?

- A. Use a Cascading Style Sheet (CSS).
- B. Use an Extensible Markup Language (XML) schema.
- C. Use inline styles.
- D. Use a WebKit.

Answer: A

Explanation: Cascading Style Sheets (CSS) is a style sheet language used for describing the look and formatting of a document written in a markup language.

CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colors, and fonts.

Question No : 139 - (Topic 2)

You are creating a Web application. The application will be consumed by client computers that run a variety of Web browsers.

Which term is used to describe the process of making the application available for client computers to access?

- A. Deploying
- B. Hosting
- C. Virtualization
- D. Casting

Answer: B

Explanation: You host web applications.

Question No : 140 - (Topic 2)

You need to allow a consumer of a class to modify a private data member.

What should you do?

- A. Provide a public function that assigns a value to the data member.
- B. Create global variables in the class.
- C. Assign a value directly to the data member.
- D. Provide a private function that assigns a value to the data member.

Answer: A

Explanation: In this example (see below), the Employee class contains two private data members, name and salary. As private members, they cannot be accessed except by member methods. Public methods named GetName and Salary are added to allow controlled access to the private members. The name member is accessed by way of a public method, and the salary member is accessed by way of a public read-only property.

Note: The private keyword is a member access modifier. Private access is the least permissive access level. Private members are accessible only within the body of the class or the struct in which they are declared

Example:

```
class Employee2
{
    private string name = "FirstName, LastName";
    private double salary = 100.0;

    public string GetName()
    {
        return name;
    }

    public double Salary
    {
        get { return salary; }
    }
}
```

Question No : 141 - (Topic 2)

You are creating an application that accepts input and displays a response to the user. You cannot create a graphical interface for this application.

Which type of application should you create?

- A. Web-based
- B. Windows Service
- C. Windows Forms
- D. console-based

Answer: A

Question No : 142 - (Topic 2)

You are writing a Web application that processes room reservation requests. You need to verify that the room that a guest has selected is not already reserved by another guest.

Which type of programming should you use to determine whether the room is still available when the request is made?

- A. functional
- B. in-browser
- C. dynamic
- D. server-side

Answer: D

Question No : 143 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

A piece of text that is 4096 bytes or smaller and is stored on and retrieved from the client computer to maintain state is known as a ViewState.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. cookie
- C. form post
- D. QueryString

Answer: B

Explanation: A piece of text that is 4096 bytes or smaller and is stored on and retrieved from the client computer to maintain state is known as a Cookie.

Question No : 144 HOTSPOT - (Topic 2)

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Statement	Yes	No
Within an XHTML document, the XHTML DOCTYPE declaration is mandatory.	<input type="radio"/>	<input type="radio"/>
Within an XHTML document, the XML namespace attribute in the html tag is mandatory.	<input type="radio"/>	<input type="radio"/>
Within an XHTML document, the html, head, title, and body tags are mandatory.	<input type="radio"/>	<input type="radio"/>

Answer:

Answer Area

Statement	Yes	No
Within an XHTML document, the XHTML DOCTYPE declaration is mandatory.	<input checked="" type="radio"/>	<input type="radio"/>
Within an XHTML document, the XML namespace attribute in the html tag is mandatory.	<input checked="" type="radio"/>	<input type="radio"/>
Within an XHTML document, the html, head, title, and body tags are mandatory.	<input checked="" type="radio"/>	<input type="radio"/>

Question No : 145 - (Topic 2)

You have a table named ITEMS with the following fields:

- ID (integer, primary key. auto generated)
- Description (text)
- Completed (Boolean)

You need to insert the following data in the table:

"Cheese", False

Which statement should you use?

- A. INSERT INTO ITEMS (Description, Completed) VALUES ('Cheese', 1)
- B. INSERT INTO ITEMS (ID, Description, Completed) VALUES (NEWID(), 'Cheese', 0)
- C. INSERT INTO ITEMS (ID, Description, Completed) VALUES (1, 'Cheese", 0)
- D. INSERT INTO ITEMS (Description, Completed) VALUES ('Cheese', 0)

Answer: D

Explanation: The string values TRUE and FALSE can be converted to bit values: TRUE is converted to 1 and FALSE is converted to 0.

Incorrect:

Not B, not C: ID is autogenerated and should not be specified.

Question No : 146 - (Topic 2)

You need to create a stored procedure that passes in a person's name and age.

Which statement should you use to create the stored procedure?

- A. `UPDATE PROCEDURE StoreData
@UserName nvarchar(255),
@Age int`
- B. `CREATE PROCEDURE StoreData
@UserName char,
@Age double`
- C. `CREATE PROCEDURE StoreData
@UserName nvarchar(255),
@Age int`
- D. `CREATE PROCEDURE StoreData (@UserName, @Age)`

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

Explanation: Example (nvarchar and int are best here):

The following example creates a stored procedure that returns information for a specific employee by passing values for the employee's first name and last name. This procedure accepts only exact matches for the parameters passed.

```
CREATE PROCEDURE HumanResources.uspGetEmployees  
@LastName nvarchar(50),  
@FirstName nvarchar(50)  
AS
```

```
SET NOCOUNT ON;
SELECT FirstName, LastName, JobTitle, Department
FROM HumanResources.vEmployeeDepartment
WHERE FirstName = @FirstName AND LastName = @LastName;
GO
```

Question No : 147 - (Topic 2)

You need to ensure the data integrity of a database by resolving insertion, update, and deletion anomalies.

Which term is used to describe this process in relational database design?

- A. Normalization
- B. Integration
- C. Isolation
- D. Resolution

Answer: A

Explanation: Database normalization is the process of organizing the fields and tables of a relational database to minimize redundancy. Normalization usually involves dividing large tables into smaller (and less redundant) tables and defining relationships between them. The objective is to isolate data so that additions, deletions, and modifications of a field can be made in just one table and then propagated through the rest of the database using the defined relationships.

Question No : 148 - (Topic 2)

Which type of Windows application presents a parent window that contains child windows?

- A. Multiple-document interface (MDI)
- B. Command-line interface (CLI)

- C. Single-document interface (SDI)
- D. Application programming interface (API)

Answer: A

Explanation: A multiple document interface (MDI) is a graphical user interface in which multiple windows reside under a single parent window. Such systems often allow child windows to embed other windows inside them as well, creating complex nested hierarchies. This contrasts with single document interfaces (SDI) where all windows are independent of each other.

Question No : 149 - (Topic 2)

The throw keyword is used to perform which two actions? (Choose two.)

- A. stop processing of the code
- B. move error handling to a separate thread
- C. raise exceptions
- D. re-throw exceptions as a different type

Answer: C,D

Explanation: * The Throw statement throws an exception that you can handle with structured exception-handling code (Try...Catch...Finally) or unstructured exception-handling code (On Error GoTo). You can use the Throw statement to trap errors within your code because Visual Basic moves up the call stack until it finds the appropriate exception-handling code.

* This example throws an ApplicationException exception.

```
Throw New ApplicationException
```

Question No : 150 - (Topic 2)

You create an application that uses Simple Object Access Protocol (SOAP).

Which technology provides information about the application's functionality to other applications?

- A. Web Service Description Language (WSDL)
- B. Common Intermediate Language (CIL)
- C. Extensible Application Markup Language (XAML)
- D. Universal Description, Discovery, and Integration (UDDI)

Answer: A

Explanation: WSDL is often used in combination with SOAP and an XML Schema to provide Web services over the Internet. A client program connecting to a Web service can read the WSDL file to determine what operations are available on the server. Any special datatypes used are embedded in the WSDL file in the form of XML Schema. The client can then use SOAP to actually call one of the operations listed in the WSDL file using for example XML over HTTP.

Question No : 151 - (Topic 2)

You execute the following code.

```
Dim beakerFull As Boolean = True
Dim flameOn As Boolean = False
Dim iResult As Integer

Select Case beakerFull
    Case True
        Select Case flameOn
            Case True
                iResult = 1
            Case False
                iResult = 2
        End Select
    Case False
        Select Case flameOn
            Case False
                iResult = 3
            Case True
                iResult = 4
        End Select
End Select
```

What will the variable result be?

- A. 1
- B. 2
- C. 3
- D. 4

Answer: B

Question No : 152 - (Topic 2)

Which three items are benefits of encapsulation? (Choose three.)

- A. restricted access
- B. flexibility
- C. maintainability

- D. performance
- E. inheritance

Answer: A,B,C

Explanation: Encapsulation is the packing of data and functions into a single component. In programming languages, encapsulation is used to refer to one of two related but distinct notions, and sometimes to the combination thereof:

- * A language mechanism for restricting access to some of the object's components.
- * A language construct that facilitates the bundling of data with the methods (or other functions) operating on that data.

Incorrect:

not E: Encapsulation is one of the four fundamental OOP concepts. The other three are inheritance, polymorphism, and abstraction.

Question No : 153 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

To minimize the amount of storage used on the hard drive by an application that generates many small files, you should make the partition as small as possible.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. file allocation table
- C. block size
- D. folder and file names

Answer: C**Question No : 154 - (Topic 2)**

When a web service is referenced from a client application in Microsoft Visual Studio, which two items are created? (Choose two.)

- A. a stub
- B. a proxy
- C. a.disco file
- D. a.wsdlfile

Answer: C,D

Explanation: A .wsdl file that references the Web service is created, together with supporting files, such as discovery (.disco and .discomap) files, that include information about where the Web service is located.

Question No : 155 - (Topic 2)

You have a stack that contains integer values. The values are pushed onto the stack in the following order: 2,4,6,8. The following sequence of operations is executed:

Pop

Push 3

Pop

Push 4

Push 6

Push 7

Pop

Pop

Pop

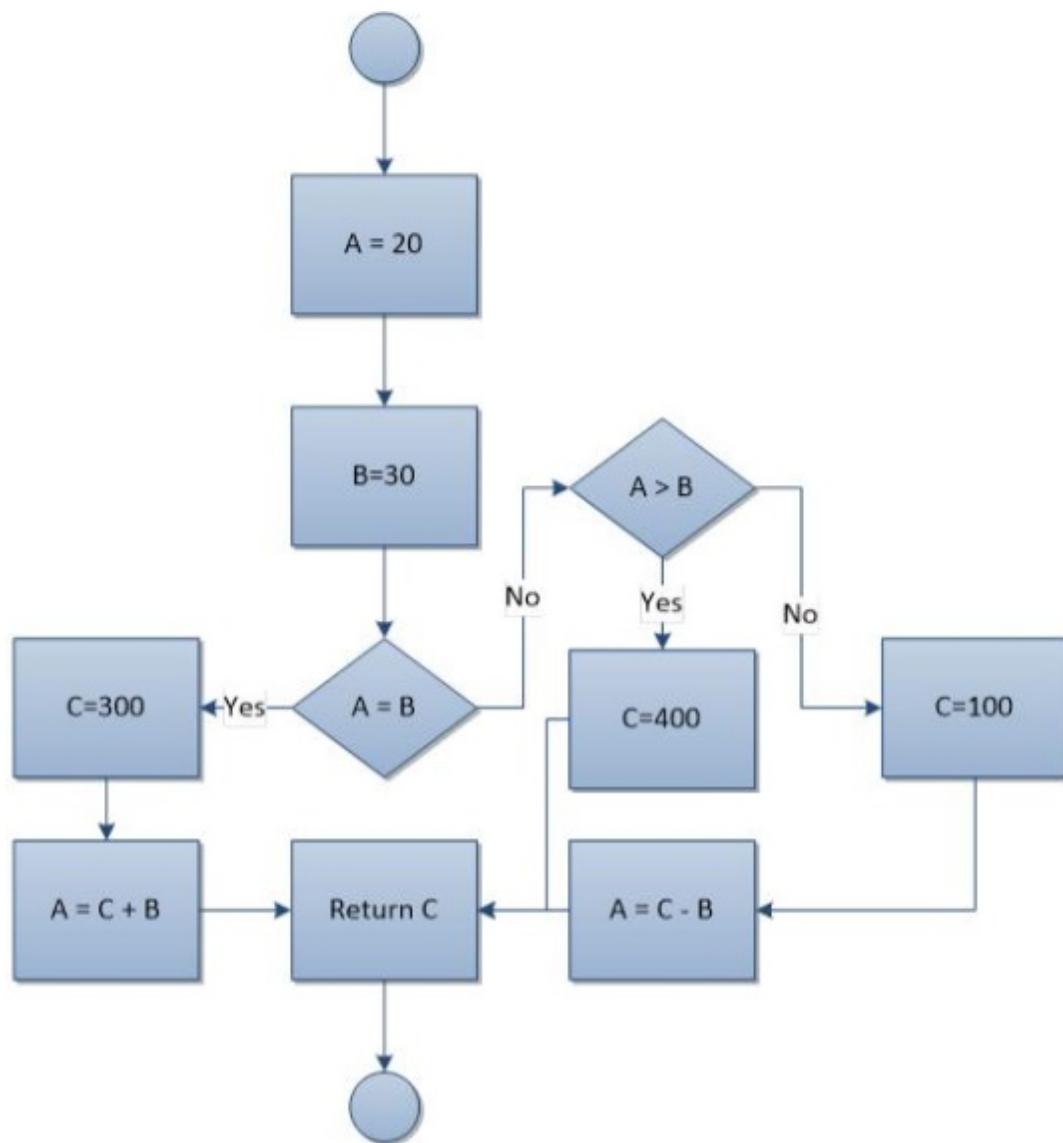
What is the value of the top element after these operations are executed?

- A. 2
- B. 3
- C. 6
- D. 7

Answer: B

Question No : 156 HOTSPOT - (Topic 2)

You have the following flowchart:



Use the drop-down menus to select the answer choice that completes each statement
Each correct selection is worth one point.

Answer Area

The value that is returned is [answer choice].

The value of A is [answer choice].

Answer Area

The value that is returned is [answer choice].

20
100
300
400

The value of A is [answer choice].

20
30
70
330

Answer:**Answer Area**

The value that is returned is [answer choice].

20
100
300
400

The value of A is [answer choice].

20
30
70
330

Question No : 157 - (Topic 2)

You are designing a class for an application. You need to restrict the availability of the member variable accessCount to the base class and to any classes that are derived from the base class.

Which access modifier should you use?

- A. Protected
- B. Private
- C. Public
- D. Friend

Answer: B

Question No : 158 HOTSPOT - (Topic 2)

You are reviewing the following code that saves uploaded images.

```
Public Structure ImageInfo
    Public Data As Byte()
    Public Length As Integer
    Public Id As Guid
End Structure

Public Sub Post()
    Dim uploaded = PostedImage()
    Dim newImage = New ImageInfo()
    newImage.Data = uploaded
    newImage.Length = uploaded.Length
    newImage.Id = Guid.NewGuid()
End Sub
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Description of Behavior	Yes	No
The bytes that comprise the image are stored on the stack.	<input type="radio"/>	<input type="radio"/>
The length of the image data is stored on the heap.	<input type="radio"/>	<input type="radio"/>
The Id of the image is stored on the stack.	<input type="radio"/>	<input type="radio"/>

Answer:

Answer Area

Description of Behavior	Yes	No
The bytes that comprise the image are stored on the stack.	<input type="radio"/>	<input checked="" type="radio"/>
The length of the image data is stored on the heap.	<input type="radio"/>	<input checked="" type="radio"/>
The Id of the image is stored on the stack.	<input checked="" type="radio"/>	<input type="radio"/>

Question No : 159 - (Topic 2)

What are two possible options for representing a Web application within Internet Information Services (IIS)? (Each correct answer presents a complete solution. Choose two.)

- A. web site
- B. virtual directory
- C. application directory
- D. application server
- E. Web directory

Answer: A,B

Explanation: * Create a Web Application

An application is a grouping of content at the root level of a Web site or a grouping of content in a separate folder under the Web site's root directory. When you add an application in IIS 7, you designate a directory as the application root, or starting point, for the application and then specify properties specific to that particular application, such as the application pool that the application will run in.

* You can make an Existing Virtual Directory a Web Application.

Question No : 160 - (Topic 2)

Which service can host an ASP.NET application?

- A. Remote Desktop Services
- B. Internet Information Services
- C. web Services
- D. Cluster Services

Answer: B

Explanation: Using Internet Information Services (IIS) Manager, you can create a local Web site for hosting an ASP.NET Web application.

Question No : 161 - (Topic 2)

You have a server that limits the number of data connections.

What should you use to optimize connectivity when the number of users exceeds the number of available connections?

- A. Named pipes
- B. Normalization
- C. Connection timeouts
- D. Connection pooling

Answer: D

Explanation: In software engineering, a connection pool is a cache of database connections maintained so that

Question No : 162 - (Topic 2)

You are creating an application that presents the user with a Windows Form.

Which event is triggered each time the Windows Form receives focus?

- A. Load
- B. Enter
- C. Activated

D. paint

Answer: B

Explanation: When you change the focus by using the mouse or by calling the Focus method, focus events of the Control class occur in the following order:

Enter
GotFocus
LostFocus
Leave
Validating
Validated

Question No : 163 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

The bubble sort algorithm steps through the list to be sorted, comparing adjacent items and swapping them if they are in the wrong order.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. merge
- C. library
- D. insertion

Answer: A

Question No : 164 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

Internet Information Services (IIS) must be installed on the client computers in order to run a deployed ASP.NET application.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. computer that hosts the application
- C. computer that you plan to deploy from
- D. Application Layer Gateway Service

Answer: B

Explanation: Internet Information Services (IIS) must be installed on computer that hosts the application in order to run a deployed ASP.NET application.

Question No : 165 - (Topic 2)

You execute the following code.

```
Dim beakerFull As Boolean = True
Dim flameOn As Boolean = False
Dim iResult As Integer = 0

If beakerFull = True Then
    If flameOn = True Then
        iResult = 1
    Else
        iResult = 2
    End If
Else
    iResult = 3
End If
```

What will the variable result be?

- A. 0
- B. 1
- C. 2
- D. 3

Answer: C

Question No : 166 DRAG DROP - (Topic 2)

You are developing an application to display track and field race results.

The application must display the race results twice. The first time it must display only the winner and runner-up. The second time it must display all participants. The code used to display results is shown below.

```
Public Sub Display()
    For Each ranking In Rankings(True)
        DisplayName(ranking)
    Next

    For Each ranking In Rankings(False)
        DisplayName(ranking)
    Next
End Sub
```

You need to implement the Rankings() function.

Complete the function to meet the requirements. (To answer, drag the appropriate code segment from the column on the left to its location on the right. Each code segment may be used once, more than once, or not at all. Each correct match is worth one point.)

Code Segments

Exit For
Exit Function
Return
Yield

Answer Area

```
Private Iterator Function Rankings(top2Only As Boolean) _
    As IEnumerable(Of String)

    Code Segment "John"
    Code Segment "Nancy"
    If (top2Only) Then
        Code Segment
    End If
    Code Segment "Chris"
End Function
```

Answer:

Code Segments	Answer Area
Exit For	Private Iterator Function Rankings(top2Only As Boolean) _ As IEnumerable(Of String)
Exit Function	Yield "John"
Return	Yield "Nancy"
Yield	If (top2Only) Then Exit Function
...	End If
	Yield "Chris"
	End Function

Question No : 167 HOTSPOT - (Topic 2)

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Description of Behavior	Yes	No
The "is a" relationship between classes refers to composition.	<input type="radio"/>	<input type="radio"/>
The "has a" relationship between classes refers to inheritance.	<input type="radio"/>	<input type="radio"/>
Both composition and inheritance allow you to create sub-objects.	<input type="radio"/>	<input type="radio"/>

Answer:

Answer Area

Description of Behavior	Yes	No
The "is a" relationship between classes refers to composition.	<input type="radio"/>	<input checked="" type="radio"/>
The "has a" relationship between classes refers to inheritance.	<input type="radio"/>	<input checked="" type="radio"/>
Both composition and inheritance allow you to create sub-objects.	<input checked="" type="radio"/>	<input type="radio"/>

Question No : 168 - (Topic 2)

Which two types of information should you include in an effective test case? (Choose two.)

- A. any pre-conditions necessary to test the case
- B. the expected result from testing the case
- C. multiple actions combined as a single step to test the case
- D. the stakeholders who originated the test case

Answer: B,C

Explanation: You can create manual test cases using Microsoft Test Manager that have both action and validation test steps. You can also share a set of common test steps between multiple test cases called shared steps. This simplifies maintenance of test steps if your application under test changes.

Question No : 169 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

The benefit of using a transaction when updating multiple tables is that the update cannot fail.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. succeeds or fails as a unit
- C. finishes as quickly as possible
- D. can be completed concurrently with other transactions

Answer: B

Explanation: The benefit of using a transaction when updating multiple tables is that the update succeeds or fails as a unit.

Question No : 170 - (Topic 2)

Class C and Class D inherit from Class B. Class B inherits from Class A. The classes have the methods shown in the following table.

Class	Method
A	m1
B	m2
C	m3
D	m4

All methods have a protected scope.

Which methods does Class C have access to?

- A. only m1, m3
- B. only m2, m3
- C. m1, m3, m4
- D. m1, m2, m3
- E. m2, m3, m4
- F. only m3, m4

Answer: D**Question No : 171 HOTSPOT - (Topic 2)**

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Description of Behavior	Yes	No
A linked list has a maximum of 100 nodes.	<input type="radio"/>	<input type="radio"/>
You can add new nodes anywhere in a linked list.	<input type="radio"/>	<input type="radio"/>
A linked list can be sorted.	<input type="radio"/>	<input type="radio"/>

Answer:**Answer Area**

Description of Behavior	Yes	No
A linked list has a maximum of 100 nodes.	<input type="radio"/>	<input checked="" type="radio"/>
You can add new nodes anywhere in a linked list.	<input checked="" type="radio"/>	<input type="radio"/>
A linked list can be sorted.	<input checked="" type="radio"/>	<input type="radio"/>

Question No : 172 - (Topic 2)

You are reviewing a design for a database. A portion of this design is shown in the exhibits. Note that you may choose either the Crow's Foot Notation or Chen Notation version of the design. (To view the Crow's Foot Notation, click the Exhibit A button. To view the Chen

Notation, click the Exhibit B button.)

Exhibit A



Exhibit B



Which term is used to describe the Customer component?

- A. Field
- B. Entity
- C. Property
- D. Attribute

Answer: B

Explanation: Customer is a table (entity).

Question No : 173 - (Topic 2)

You are creating an application that presents users with a graphical interface in which they computers that do not have network connectivity.

Which type of application should you choose?

- A. ClickOnce
- B. Windows Service
- C. Windows Forms
- D. Console-based

Answer: C**Explanation:** Use Windows Forms when a GUI is needed.**Question No : 174 - (Topic 2)**

You need to evaluate the following expression:

(A>B) AND (C<D)

What is the value of this expression if A=3, B=4, C=4, and D=5?

- A. 0
- B. 4
- C. 5
- D. False
- E. Null
- F. True

Answer: D**Explanation:** A>B is false.**Question No : 175 - (Topic 2)**

You execute the following code.

```
For i = 0 to 10 Step 2
    Console.WriteLine("Hello")
Next
```

How many times will the word Hello be printed?

- A. 5

- B. 6
- C. 10
- D. 12

Answer: B

Question No : 176 - (Topic 2)

You need to create a property in a class. Consumers of the class must be able to read the values of the property. Consumers of the class must be prevented from writing values to the property.

Which property procedure should you include?

- A. Set
- B. Get
- C. Let
- D. Return

Answer: B

Question No : 177 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

A table whose attributes depend only on the primary key must be at least second normal form.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. first
- C. third
- D. fourth

Answer: A

Explanation: 2nd Normal Form Definition

A database is in second normal form if it satisfies the following conditions:

It is in first normal form

All non-key attributes are fully functional dependent on the primary key

Question No : 178 - (Topic 2)

In the application life cycle, the revision of an application after it has been deployed is referred to as:

- A. Monitoring
- B. Maintenance
- C. Unit testing
- D. Integration

Answer: B

Question No : 179 - (Topic 2)

Which type of application has the following characteristics when it is installed?

- ✍ Runs continuously in the background by default when the startup type is set to automatic
- ✍ Presents no user interface

- A. Console-based
- B. Windows Forms
- C. Windows Service
- D. Batch file

Answer: C

Explanation: A Windows service runs in the background and has no interface.

Question No : 180 HOTSPOT - (Topic 2)

You are developing a web application.

You need to create the following graphic by using Cascading Style Sheets (CSS):



Use the drop-down menus to select the answer choice that completes each statement.
Each correct selection is worth one point.

Answer Area

For the CSS Style **background-image**, you should use the value
[answer choice]

For the CSS Style **border-radius**, you
should use the value **[answer choice]**

Answer Area

For the CSS Style **background-image**, you should use the value
[answer choice]

linear-gradient(to top, green, black);
linear-gradient(to bottom, green, black);
radial-gradient(green, black);
repeating-linear-gradient(green, black);

For the CSS Style **border-radius**, you
should use the value **[answer choice]**

10px;
10px, 10px, 10px;
inherit;
initial;**Answer:****Answer Area**

For the CSS Style **background-image**, you should use the value
[answer choice]

linear-gradient(to top, green, black);
linear-gradient(to bottom, green, black);
radial-gradient(green, black);
repeating-linear-gradient(green, black);

For the CSS Style **border-radius**, you
should use the value **[answer choice]**

10px;
10px, 10px, 10px;
inherit;
initial;

Question No : 181 - (Topic 2)

How many parameters can a default constructor have?

- A. 0
- B. 1
- C. 2
- D. 3 or more

Answer: A

Explanation: If a class contains no instance constructor declarations, a default instance constructor is automatically provided. That default constructor simply invokes the parameterless constructor of the direct base class.

Question No : 182 - (Topic 2)

You have a class with a property.

You need to ensure that consumers of the class can write to the value of the property.

Which keyword should you use?

- A. Add
- B. value
- C. Set
- D. Get

Answer: C

Explanation: Set:

The set {} implementation receives the implicit argument "value." This is the value to which the property is assigned.

* Property. On a class, a property gets and sets values. A simplified syntax form, properties are implemented in the IL as methods (get, set).

Question No : 183 - (Topic 2)

You are creating an ASP. NET Web application.

Which line of code should you use to require a control to process on the computer that hosts the application?

- A. runat= "server"
- B. redirect*="HostPage. htm"
- C. AutoEventWireup="true"
- D. defaultRedirect="ServerPage. htm"

Answer: A

Question No : 184 HOTSPOT - (Topic 2)

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Statement	Yes	No
XHTML attribute names must be in uppercase.	<input type="radio"/>	<input type="radio"/>
XHTML attribute values must be in quotation marks.	<input type="radio"/>	<input type="radio"/>
XHTML attribute minimization is forbidden.	<input type="radio"/>	<input type="radio"/>

Answer:**Answer Area**

Statement	Yes	No
XHTML attribute names must be in uppercase.	<input type="radio"/>	<input checked="" type="radio"/>
XHTML attribute values must be in quotation marks.	<input checked="" type="radio"/>	<input type="radio"/>
XHTML attribute minimization is forbidden.	<input checked="" type="radio"/>	<input type="radio"/>

Question No : 185 - (Topic 2)

In which order do the typical phases of the Software Development Life Cycle occur?

- A. Requirements gathering, design, development, and testing
- B. Development, design, requirements gathering, and testing
- C. Design, requirements gathering, development, and testing
- D. Design, development, requirements gathering, and testing

Answer: A**Question No : 186 - (Topic 2)**

An application presents the user with a graphical interface. The interface includes buttons that the user clicks to perform tasks. Each time the user clicks a button, a method is called that corresponds to that button.

Which term is used to describe this programming model?

- A. Event driven
- B. Structured
- C. Service oriented

D. Functional**Answer: A****Question No : 187 - (Topic 2)**

Which language allows you to dynamically create content on the client side?

- A. Cascading Style Sheets (CSS)
- B. JavaScript (JS)
- C. Extensible Markup Language (XML)
- D. Hypertext Markup Language (HTML)

Answer: B

Explanation: JavaScript (JS) is a dynamic computer programming language. It is most commonly used as part of web browsers, whose implementations allow client-side scripts to interact with the user, control the browser, communicate asynchronously, and alter the document content that is displayed.

Question No : 188 - (Topic 2)

How does a console-based application differ from a Windows Store app?

- A. Windows Store apps do not provide a method for user input
- B. Console-based applications do not display a graphical interface.
- C. Windows Store apps can access network resources.
- D. Console-based applications require the XNA Framework to run.

Answer: B**Question No : 189 HOTSPOT - (Topic 2)**

You are reviewing the following class that is used to manage the results of a 5K race:

```
Public Class Player
    Private _name As String
    Public Const Key As String = "player"

    Private _ranking As Integer
    Public Property Ranking() As Integer
        Get
            Return _ranking
        End Get
        Private Set(value As Integer)
            _ranking = value
        End Set
    End Property

    Public Function MatchName(searchTerm As String) As Boolean
        Return _name.ToLower() = searchTerm
    End Function

    Public Sub SetResult(rank As Integer, name As String)
        If (Not IsNothing(_name)) Then
            Return
        End If

        Ranking = rank
        _name = name
    End Sub
End Class
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Description of Behavior	Yes	No
You can only set the player's ranking once.	<input type="radio"/>	<input type="radio"/>
If you call the MatchName method, the code will throw an exception.	<input type="radio"/>	<input type="radio"/>
You can change Key from "player" to "racer".	<input type="radio"/>	<input type="radio"/>

Answer:**Answer Area**

Description of Behavior	Yes	No
You can only set the player's ranking once.	<input checked="" type="radio"/>	<input type="radio"/>
If you call the MatchName method, the code will throw an exception.	<input checked="" type="radio"/>	<input type="radio"/>
You can change Key from "player" to "racer".	<input type="radio"/>	<input checked="" type="radio"/>

Question No : 190 - (Topic 2)

You need to debug a Windows Service application by using breakpoints.

What should you do?

- A. Write all events to an event log.
- B. Set the Windows Service status to Paused.
- C. Implement the Console.WriteLine method throughout the Windows Service.
- D. use the Attach to Process menu in Microsoft Visual Studio.

Answer: D

Explanation: * Because a service must be run from within the context of the Services Control Manager rather than from within Visual Studio, debugging a service is not as straightforward as debugging other Visual Studio application types. To debug a service, you must start the service and then attach a debugger to the process in which it is running.

* To debug a service

Install your service.

Start your service, either from Services Control Manager, Server Explorer, or from code.

In Visual Studio, choose Attach to Process from the Debug menu.

Etc.

Question No : 191 - (Topic 2)

You are writing a Web application that processes room reservation requests. You need to verify that the room that a guest has selected is not already reserved by another guest.

Which type of programming should you use to determine whether the room is still available when the request is made?

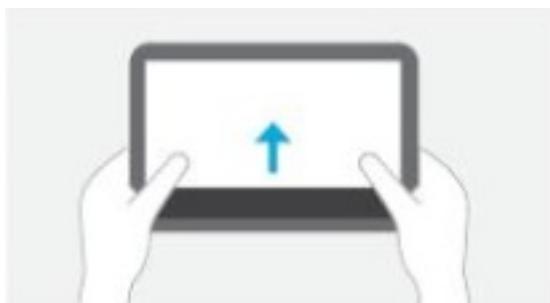
- A. client-side
- B. batch processing
- C. server-side
- D. multithreaded

Answer: C

Explanation: For room availability we need to check a database located on a server.

Question No : 192 HOTSPOT - (Topic 2)

You are creating a Windows Store application that uses the following gesture:



Use the drop-down menus to select the answer choice that completes each statement. Each correct selection is worth one point.

Answer Area

The gesture shown in the graphic is called [answer choice].

The surface displayed after the gesture has been completed is the [answer choice].

Answer Area

The gesture shown in the graphic is called [answer choice].

moving
pushing
sliding
swiping

The surface displayed after the gesture has been completed is the [answer choice].

app bar
canvas
charms
context menu

Answer:**Answer Area**

The gesture shown in the graphic is called [answer choice].

moving
pushing
sliding
swiping

The surface displayed after the gesture has been completed is the [answer choice].

app bar
canvas
charms
context menu

Question No : 193 - (Topic 2)

In this XHTML code sample, what will cause an error?

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
  <head>
    <title>The Title</title>
  </head>
  <body>
    <h1>This is a Heading.</h1>
    <p>This is a paragraph</p><br>
  </body>
</html>
```

- A. The line break tag is incorrectly formatted.
- B. The HTML tags do not read XHTML.
- C. The body tag is missing a background attribute,
- D. All tags are not in uppercase.

Answer: A

Explanation: In XHTML, the
 tag must be properly closed, like this:
.

Question No : 194 - (Topic 2)

You need to create an application that processes data on a last-in, first-out (LIFO) basis.

Which data structure should you use?

- A. Stack
- B. Array
- C. Tree
- D. Queue

Answer: A

Explanation: A stack implements LIFO.

Question No : 195 - (Topic 2)

How does a console-based application differ from a Windows Forms application?

- A. Windows Forms applications can access network resources.
- B. Console-based applications do not display a graphical interface.
- C. Console-based applications require the XNA Framework to run.
- D. Windows Forms applications do not provide a method for user input.

Answer: B

Question No : 196 - (Topic 2)

Which term is used to describe a class that inherits functionality from an existing class?

- A. Superclass
- B. Base class
- C. Inherited class
- D. Derived class

Answer: D

Explanation: Classes (but not structs) support the concept of inheritance. A class that derives from another class (the *base class*) automatically contains all the public, protected, and internal members of the base class except its constructors and destructors.

Question No : 197 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

When a base class declares a method as virtual, the method is hidden from implementation by a derived class.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. can be overridden with its own implementation by a derived class
- C. must be overridden in any non-abstract class that directly inherits from that class
- D. cannot be overridden with its own implementation by a derived class

Answer: B

Question No : 198 - (Topic 2)

Which language was designed for the primary purpose of querying data, modifying data, and managing databases in a Relational Database Management System?

- A. C ++
- B. Java
- C. SQL
- D. Visual Basic

Answer: C

Explanation: SQL is a special-purpose programming language designed for managing data held in a relational database management system (RDBMS).

Question No : 199 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

Converting a value type to a reference type in an object is called boxing.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. unboxing
- C. interfacing
- D. mapping

Answer: A

Explanation: Boxing is an implicit conversion of a Value Types (C# Reference) to the type object or to any interface type implemented by this value type.

Question No : 200 - (Topic 2)

What is displayed when you attempt to access a Web service by using a Web browser?

- A. a visual depiction of your preliminary connection to the Web service
- B. a listing of methods that are available in the Web service

- C. an error page explaining that you have accessed the Web service incorrectly
- D. a directory listing of the Web services application structure

Answer: B

Explanation: The server, in response to this request, displays the Web service's HTML description page.

The Web service's HTML description page shows you all the Web service methods supported by a particular Web service. Link to the desired Web service method and enter the necessary parameters to test the method and see the XML response.

Question No : 201 - (Topic 2)

Which term is used to describe small units of text that are stored on a client computer and retrieved to maintain state?

- A. trace
- B. cross-page post
- C. cookie
- D. server transfer

Answer: C

Explanation: HTTP is a stateless protocol. This means that user data is not persisted from one Web page to the next in a Web site. One way to maintain state is through the use of cookies. Cookies store a set of user specific information, such as a reference identifier for a database record that holds customer information.

Question No : 202 - (Topic 2)

What are two advantages of normalization in a database? (Choose two.)

- A. reduces schema limitations
- B. minimizes impact of data corruption
- C. decreases space used on disk
- D. prevents data inconsistencies

Answer: C,D

Question No : 203 - (Topic 2)

The purpose of the Catch section in an exception handler is to:

- A. Conclude the execution of the application.
- B. Break out of the error handler.
- C. Execute code only when an exception is thrown.
- D. Execute code regardless of whether an exception is thrown.

Answer: C

Question No : 204 - (Topic 2)

You are creating a routine that will perform calculations by using a repetition structure. You need to ensure that the entire loop executes at least once.

Which looping structure should you use?

- A. For-Each
- B. For
- C. While
- D. Do-While

Answer: D

Explanation: In a Do..While loop the test is at the end of the structure, so it will be executed at least once.

Question No : 205 - (Topic 2)

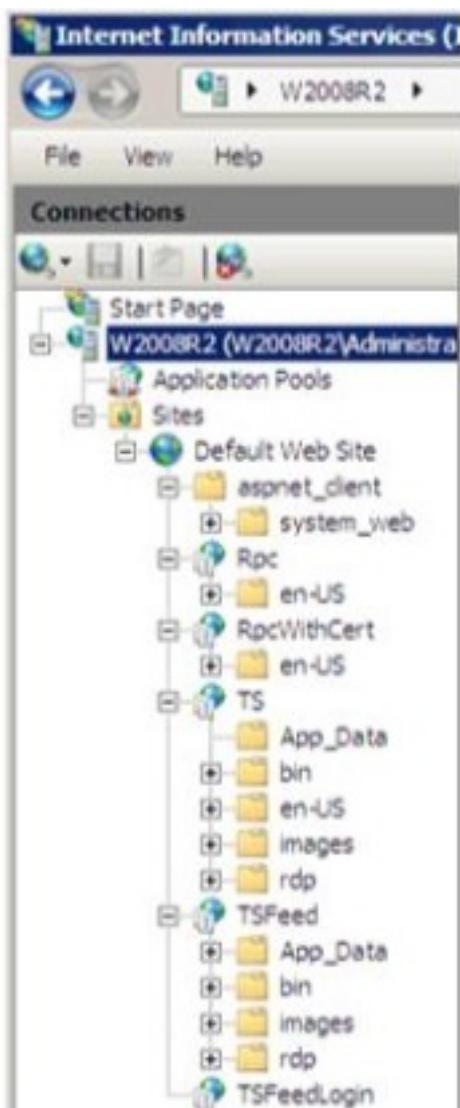
Simulating the final design of an application in order to ensure that the development is progressing as expected is referred to as:

- A. Software testing
- B. Prototyping
- C. Flowcharting
- D. Analyzing requirements

Answer: A

Question No : 206 HOTSPOT - (Topic 2)

You open the Internet Information Services 7.5 Manager console as shown in the following exhibit:



You need to examine the current configuration of the server W2008R2.

Use the drop-down menus to select the answer choice that answers each question. Each correct selection is worth one point.

Answer Area

How many sites are configured on server W2008R2?

How many applications are configured on server W2008R2?

Answer Area

How many sites are configured on server W2008R2?

0
1
5
13

How many applications are configured on server W2008R2?

0
1
5
13

Answer:**Answer Area**

How many sites are configured on server W2008R2?

0
1
5
13

How many applications are configured on server W2008R2?

0
1
5
13

Question No : 207 - (Topic 2)

You have a SQL Server database named MyDB that uses SQL Server Authentication.

Which connection string should you use to connect to MyDB?

- A. Data Source=MyDB; Integrated Security=SSPf; Initial Catalog=Sales

- B. Data Source=MyDB; Trusted_Connection=True; MultipleActiveResultSets=True; Initial Catalog=Sales
- C. Data Source=MyDB; Integrated Security=True; Initial Catalog=Sales
- D. Data Source=MyDB; UserID=username; Password=P@sswOrd; Initial Catalog=Sales

Answer: D

Explanation: Integrated Security

Integrated Security is by default set to false.

When false, User ID and Password are specified in the connection.

Incorrect:

not C: Windows Authentication (Integrated Security = true) remains the most secure way to log in to a SQL Server database.

Question No : 208 - (Topic 2)

You run the following code.

```
Dim beakerFull As Boolean = True
Dim flameOn As Boolean = False
Dim iResult As Integer

Select Case beakerFull
    Case True
        Select Case flameOn
            Case True
                iResult = 4
            Case False
                iResult = 3
        End Select
    Case False
        Case flameOn
        Case False
            iResult = 2
        Case True
            iResult = 1
End Select
```

What will the value of the variable iResult be?

- A. 1
- B. 2
- C. 3
- D. 4

Answer: C

Question No : 209 - (Topic 2)

The elements of an array must be accessed by:

- A. Calling the item that was most recently inserted into the array.
- B. Using a first-in, last-out (FILO) process.
- C. Using an integer index.
- D. Calling the last item in the memory array.

Answer: C

Question No : 210 - (Topic 2)

Two classes named Circle and Square inherit from the Shape class. Circle and Square both inherit Area from the Shape class, but each computes Area differently.

Which term is used to describe this object-oriented concept?

- A. encapsulation
- B. superclassing
- C. polymorphism
- D. overloading

Answer: C

Explanation: You can use polymorphism to in two basic steps:

Create a class hierarchy in which each specific shape class derives from a common base class.

Use a virtual method to invoke the appropriate method on any derived class through a single call to the base class method.

Question No : 211 DRAG DROP - (Topic 2)

You are extending an application that stores and displays the results of various types of foot races. The application contains the following definitions:

```
Public Interface IDisplayResult
    Sub Display()
End Interface

Public Class Race
    Public Seconds As Integer

    Public Overridable Sub Display()
        Console.WriteLine(Seconds)
    End Sub
End Class
```

The following code is used to display the result for a race:

```
Dim r1 = New FootRace()
Dim r2 = TryCast(r1, IDisplayResult)
r1.Seconds = 99

r1.Display()
r2.Display()
r1.DisplayRaw()
```

The contents of the console must be as follows:

- ✓ 99 seconds
- ✓ 1.65 minutes
- ✓ 99

You need to implement the FootRace class.

Match the method declaration to the method body. (To answer, drag the appropriate declaration from the column on the left to its body on the right. Each declaration may be used once, more than once, or not at all. Each correct match is worth one point.)

Code Segments

```
Public Overrides Sub Display()
```

```
Public Sub DisplayRaw()
```

```
Public Sub Display() Implements IDisplayResult.Display
```

```
Private Sub Display()
```

Answer Area

```
Public Class FootRace  
    Inherits Race  
    Implements IDisplayResult
```

Code Segment

```
        Console.WriteLine(Seconds & "seconds")  
End Sub
```

Code Segment

```
        MyBase.Display()  
End Sub
```

Code Segment

```
        Console.WriteLine(Seconds / 60 & " minutes")  
End Sub  
End Class
```

Answer:

Code Segments

```
Public Overrides Sub Display()
```

```
Public Sub DisplayRaw()
```

```
Public Sub Display() Implements IDisplayResult.Display
```

```
Private Sub Display()
```

Answer Area

```
Public Class FootRace  
    Inherits Race  
    Implements IDisplayResult
```

```
    Public Overrides Sub Display()
```

```
        Console.WriteLine(Seconds & "seconds")  
    End Sub
```

```
    Public Sub DisplayRaw()
```

```
        MyBase.Display()  
    End Sub
```

```
    Public Sub Display() Implements IDisplayResult.Display
```

```
        Console.WriteLine(Seconds / 60 & " minutes")  
    End Sub
```

```
End Class
```

Question No : 212 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

A data dictionary that describes the structure of a database is called metadata.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. normalization
- C. a database management system (DBMS)
- D. metacontent

Answer: A

Question No : 213 - (Topic 2)

Which type of function can a derived class override?

- A. A Protected Overridable member function
- B. A Shared function
- C. A Private Overridable function
- D. A non-overridable public member function

Answer: A

Explanation: The **Overridable** modifier allows a property or method in a class to be overridden in a derived class.

You cannot specify **Overridable** or **NotOverridable** for a **Private** method.

Question No : 214 - (Topic 2)

Where must Internet Information Services (IIS) be installed in order to run a deployed ASP.NET application?

- A. on the computer that you plan to deploy from
- B. on the client computers
- C. on the computer that hosts the application
- D. on the Application Layer Gateway Service

Answer: C

Explanation: IIS is run on the web server. The web server is hosting the application.

Question No : 215 - (Topic 2)

You are creating an application for computers that run Windows XP or later. This application must run after the computer starts. The user must not be aware that the

application is running.

The application performs tasks that require permissions that the logged-in user does not have.

Which type of application allows this behavior?

- A. Windows Forms application
- B. DOS batch file
- C. Terminate-and-stay-resident (TSR) program
- D. Windows Service application

Answer: D

Question No : 216 - (Topic 2)

You are designing a Windows Store application.

You need to design the application so that users can share content by connecting two or more devices by physically tapping the devices together.

Which user experience (UX) guideline for Windows Store applications should you use?

- A. share and data exchange
- B. device-awareness
- C. location-awareness
- D. proximity gestures

Answer: A

Question No : 217 - (Topic 2)

The following functions are defined:

```
Public Shared Function Printer(j As Integer) As Integer
    Dim i As Integer = j
    While i > 0
        Console.WriteLine(i)
        i = Printer(i - 1)
    End While
    Return j
End Function
```

What does the console display after the following line?

Printer(2)

- A. 210
- B. 211
- C. 2101
- D. 2121

Answer: B

Question No : 218 - (Topic 2)

Which of the following must exist to inherit attributes from a particular class?

- A. Public properties
- B. A has-a relationship
- C. Static members
- D. An is-a relationship

Answer: A

Explanation: There must be some public properties that can be inherited.

Question No : 219 - (Topic 2)

A data warehouse database is designed to:

- A. Require validation of incoming data during real-time business transactions.
- B. Enable business decisions by collecting, consolidating, and organizing data.
- C. Support real-time business operations.
- D. Support a large number of concurrent users.

Answer: B

Question No : 220 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

When creating a site to utilize message queuing, the "IP address" must be configured to MSMQ.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. protocol
- C. host header
- D. port

Answer: B

Explanation: MSMQ is a messaging protocol that allows applications running on separate servers/processes to communicate in a failsafe manner.

Question No : 221 - (Topic 2)

You are reviewing a design for a database. A portion of this design is shown in the exhibit. Note that you may choose to view either the Crow's Foot Notation or Chen Notation version of the design. (To view the Crow's Foot Notation, click the Exhibit A button. To view the Chen Notation, click the Exhibit B button.)

Exhibit A**Exhibit B**

Which term is used to describe the relationship between Customer and Order?

- A. many-to-many
- B. multi-dimensional
- C. one-to-many
- D. one-to-one
- E. one-dimensional

Answer: C

Explanation: A customer can have many orders.

Question No : 222 DRAG DROP - (Topic 2)

You are developing an application that displays a list of race results. The race results are stored in the following class:

```
Public Class RaceSpeedRecord
    Public Faster As RaceSpeedRecord
    Public Slower As RaceSpeedRecord
    Public Race As String
    Public Time As Double
End Class
```

The code that manages the list is as follows:

Public Class Results

```
    Public CurrentOlympicRecord As RaceSpeedRecord
```

```
    Public Sub New()
```

```
        CurrentOlympicRecord = New RaceSpeedRecord()
```

```
    End Sub
```

```
    Public Sub AddRace(raceName As String, time As Double)
```

```
    End Sub
```

```
End Class
```

You need to implement the AddRace method.

Match the code segment to its location. (To answer, drag the appropriate code segment from the column on the left to its location on the right. Each code segment may be used once, more than once, or not at all. Each correct match is worth one point.)

Code Segments

```
current.Faster
```

```
current.Slower
```

```
current.Time
```

```
current.Race
```

Answer Area

```
    Public Sub AddRace(raceName As String, time As Double)
```

```
        Dim current = CurrentOlympicRecord
```

```
        While <input type="text" value="Code Segment"/> > time
```

```
            current = <input type="text" value="Code Segment"/>
```

```
        End While
```

```
        Dim rsr = New RaceSpeedRecord
```

```
        rsr.Race = raceName
```

```
        rsr.Time = time
```

```
        rsr.Faster = <input type="text" value="Code Segment"/>
```

```
        rsr.Slower = <input type="text" value="Code Segment"/>
```

```
        current.Faster.Slower = rsr
```

```
        current.Slower.Faster = rsr
```

```
    End Sub
```

Answer:

Code Segments

current.Faster
current.Slower
current.Time
current.Race

Answer Area

```
Public Sub AddRace(raceName As String, time As Double)  
  
    Dim current = CurrentOlympicRecord  
  
    While current.Time > time  
        current = current.Slower  
    End While  
    Dim rsr = New RaceSpeedRecord  
    rsr.Race = raceName  
    rsr.Time = time  
  
    rsr.Faster = current.Faster  
    rsr.Slower = current.Slower  
  
    current.Faster.Slower = rsr  
    current.Slower.Faster = rsr  
End Sub
```

Question No : 223 - (Topic 2)

Which programming language is characterized as client-side, dynamic and weakly typed?

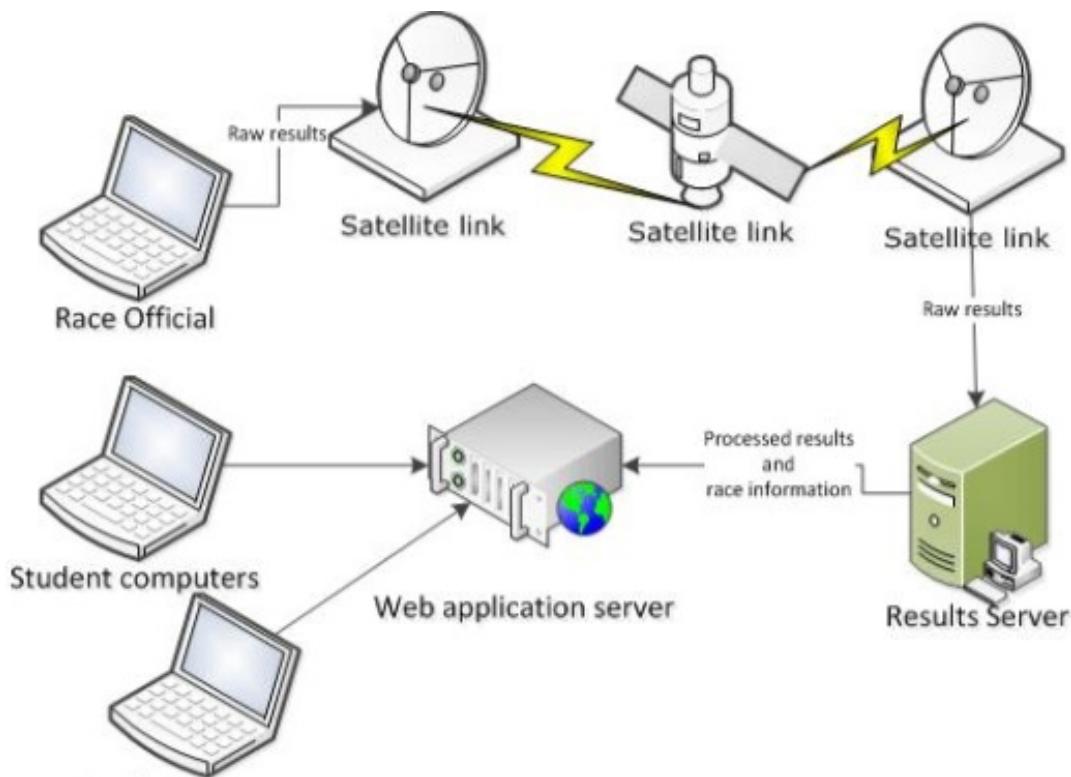
- A. ASP.NET
- B. C#
- C. JavaScript
- D. HTML

Answer: C

Explanation: JavaScript is characterized as a dynamic, weakly typed, prototype-based language with first-class functions. It is primarily used in the form of client-side JavaScript for the development of dynamic websites.

Question No : 224 HOTSPOT - (Topic 2)

You are reviewing the architecture for a system that allows race officials to enter the results of 5K race results. The results are then made available to students using a web application. The architecture is shown below:



Use the drop-down menus to select the answer choice that answers each question. Each correct selection is worth one point.

Answer Area

To minimize the time between when a race official records the results and when the results are available on the web, which part of the system is critical?

To increase the number of students that can access race results, what element should be added to the system?

Answer Area

To minimize the time between when a race official records the results and when the results are available on the web, which part of the system is critical?

- satellite link
- student computer
- race official computer
- web application server

To increase the number of students that can access race results, what element should be added to the system?

- satellite link
- race officials
- results servers
- web application servers

Answer:

Answer Area

To minimize the time between when a race official records the results and when the results are available on the web, which part of the system is critical?

satellite link
student computer
race official computer
web application server

To increase the number of students that can access race results, what element should be added to the system?

satellite link
race officials
results servers
web application servers

Question No : 225 - (Topic 2)

What are the three basic states that a Windows service can be in? (Choose three.)

- A. running
- B. starting
- C. halted
- D. stopped
- E. paused

Answer: B,D,E

Explanation: A service can exist in one of three basic states: Running, Paused, or Stopped.

Question No : 226 - (Topic 2)

You have a Windows Service running in the context of an account that acts as a non-privileged user on the local computer. The account presents anonymous credentials to any remote server.

What is the security context of the Windows Service?

- A. Local System
- B. NetworkService
- C. user
- D. LocalService

Answer: D

Explanation: LocalService, which runs in the context of an account that acts as a non-privileged user on the local computer, and presents anonymous credentials to any remote server;

Question No : 227 - (Topic 2)

You have a class named Truck that inherits from a base class named Vehicle. The Vehicle class includes a protected method named brake ().

How should you call the Truck Class implementation of the brake () method?

- A. Mybase.brake ()
- B. Truck.brakef()
- C. Vehicle.brake()
- D. Me.brake ()

Answer: A

Explanation: The MyBase keyword behaves like an object variable referring to the base class of the current instance of a class. MyBase is commonly used to access base class members that are overridden or shadowed in a derived class.

Question No : 228 HOTSPOT - (Topic 2)

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Description of Behavior	Yes	No
A queue's items are stored in the order they were added.	<input type="radio"/>	<input type="radio"/>
A queue is a first in, first out (FIFO) data structure.	<input type="radio"/>	<input type="radio"/>
A queue has a limited number of items.	<input type="radio"/>	<input type="radio"/>

Answer:**Answer Area**

Description of Behavior	Yes	No
A queue's items are stored in the order they were added.	<input checked="" type="radio"/>	<input type="radio"/>
A queue is a first in, first out (FIFO) data structure.	<input checked="" type="radio"/>	<input type="radio"/>
A queue has a limited number of items.	<input type="radio"/>	<input checked="" type="radio"/>

Question No : 229 - (Topic 2)

You have a class named Glass that inherits from a base class named Window. The Window class includes a protected method named break().

How should you call the Glass class implementation of the break() method?

- A. Glass.break()
- B. Window.break()

- C. Me.break()
- D. MyBase.break()

Answer: B

Question No : 230 - (Topic 2)

You are creating an application that presents the user with a Windows Form. You need to configure the application to display a message box to confirm that the user wants to close the form.

Which event should you handle?

- A. Deactivate
- B. FormClosed
- C. Leave
- D. FormClosing

Answer: D

Explanation: The Closing event occurs as the form is being closed.

Question No : 231 - (Topic 2)

You have a Microsoft ASP.NET web application.

You need to store a value that can be shared across users on the server.

Which type of state management should you use?

- A. session
- B. application
- C. cookies
- D. ViewState

Answer: B

Explanation: Application state is a data repository available to all classes in an ASP.NET

application. Application state is stored in memory on the server and is faster than storing and retrieving information in a database. Unlike session state, which is specific to a single user session, application state applies to all users and sessions. Therefore, application state is a useful place to store small amounts of often-used data that does not change from one user to another.

Incorrect:

not A: Session State contains information that is pertaining to a specific session (by a particular client/browser/machine) with the server. It's a way to track what the user is doing on the site.. across multiple pages...amid the statelessness of the Web. e.g. the contents of a particular user's shopping cart is session data. Cookies can be used for session state.
Not D: Viewstate is a state management technique in asp.net. ASP.NET Viewstate is preserving the data between the requests or postbacks and stored in hidden fields on the page.

Question No : 232 - (Topic 2)

You are creating the necessary variables for an application. The data you will store in these variables has the following characteristics:

- ✓ Consists of numbers
- ✓ Includes numbers that have decimal points
- ✓ Requires more than seven digits of precision

You need to use a data type that will minimize the amount of memory that is used.

Which data type should you use?

- A. Decimal
- B. Single
- C. Byte
- D. Double

Answer: D

Explanation: The double keyword signifies a simple type that stores 64-bit floating-point values.

Precision: 15-16 digits

Question No : 233 HOTSPOT - (Topic 2)

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Description of Behavior	Yes	No
An entity relationship diagram (ERD) is designed for an object-oriented database.	<input type="radio"/>	<input type="radio"/>
An entity relationship diagram (ERD) contains entities, relationships, and attributes.	<input type="radio"/>	<input type="radio"/>
Cardinality refers to how one table is linked to another table; as one-to-many.	<input type="radio"/>	<input type="radio"/>

Answer:**Answer Area**

Description of Behavior	Yes	No
An entity relationship diagram (ERD) is designed for an object-oriented database.	<input type="radio"/>	<input checked="" type="radio"/>
An entity relationship diagram (ERD) contains entities, relationships, and attributes.	<input checked="" type="radio"/>	<input type="radio"/>
Cardinality refers to how one table is linked to another table; as one-to-many.	<input checked="" type="radio"/>	<input type="radio"/>

Question No : 234 - (Topic 2)

You have a website that includes a form for username and password.

You need to ensure that users enter their username and password. The validation must work in all browsers.

Where should you put the validation control?

- A. in the Web.config file
- B. in the server-side code only
- C. in the client-side code only
- D. in both the client-side code and the server-side code

Answer: D

Explanation: From version 2.0 on, ASP.NET recognized the JavaScript capabilities of these browsers, so client-side validation is now available to all modern browsers, including Opera, Firefox, and others. Support is even better now in ASP.NET 4.0. That said, it's important not to forget that JavaScript can be disabled in any browser, so client-side validation cannot be relied upon—we must always validate any submitted data on the server.

Question No : 235 - (Topic 2)

Which three are valid SQL keywords? (Choose three.)

- A. GET
- B. FROM
- C. SELECT
- D. WHAT
- E. WHERE

Answer: B,C,E

Explanation: Example:

`SELECT * FROM Customers WHERE Country='Mexico';`

Question No : 236 - (Topic 2)

You are developing a database that other programmers will query to display race results.

You need to provide the ability to query race results without allowing access to other information in the database.

What should you do?

- A. Add an AFTER UPDATE trigger on the result table to reject updates.
- B. Create an index on the result table.
- C. Place the query into a stored procedure.
- D. Disable implicit transactions.

Answer: C

Question No : 237 - (Topic 2)

The purpose of the Finally section in an exception handler is to:

- A. Execute code only when an exception is thrown.
- B. Break out of the error handler.
- C. Execute code regardless of whether an exception is thrown.
- D. Conclude the execution of the application.

Answer: C

Explanation: By using a finally block, you can clean up any resources that are allocated in a try block, and you can run code even if an exception occurs in the try block. Typically, the statements of a finally block run when control leaves a try statement. The transfer of control can occur as a result of normal execution, of execution of a break, continue, goto, or return statement, or of propagation of an exception out of the try statement.

Question No : 238 - (Topic 2)

You are creating a variable for an application.

You need to store data that has the following characteristics in this variable:

- ✓ Consists of numbers and characters
- ✓ Includes numbers that have decimal points

Which data type should you use?

- A. Decimal
- B. Char
- C. String
- D. Single

Answer: C

Explanation: Need a string to store characters.

Question No : 239 - (Topic 2)

You are creating an application that presents users with a graphical interface. Users will run this application from remote computers. Some of the remote computers do not have the .NET Framework installed. Users do not have permissions to install software.

Which type of application should you choose?

- A. Console-based
- B. ASP. NET
- C. Windows Service
- D. Windows Forms

Answer: B

Question No : 240 - (Topic 2)

You are creating a database for a student directory. The Students table contains the following fields:

firstName
lastName
emailAddress
telephoneNumber

Which statement will retrieve only the first name, last name, and telephone number for every student listed in the directory?

A. `SELECT firstName, lastName, telephoneNumber FROM Students`

B. `WHERE Students SELECT firstName, lastName, telephoneNumber`

C. `WHERE Students SELECT *`

D. `SELECT firstName, lastName, telephoneNumber IN Students`

E. `SELECT * FROM Students`

A. Option A

B. Option B

C. Option C

D. Option D

Answer: A

Explanation: Use `SELECT...FROM` and list the fields you want to retrieve.

Question No : 241 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

Arguments are passed to console applications as a Hashtable object.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

A. No change is needed

- B. String Array
- C. StoredProcedurCollection
- D. Dictionary

Answer: B

Explanation: Arguments are passed to console applications as a String Array object.

Question No : 242 - (Topic 2)

All objects in .NET inherit from which item?

- A. a reference type
- B. the System.Type class
- C. a value type
- D. the System.Object class

Answer: D

Explanation: The System.Object class supports all classes in the .NET Framework class hierarchy and provides low-level services to derived classes. This is the ultimate base class of all classes in the .NET Framework; it is the root of the type hierarchy.

Question No : 243 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

Converting an object to a more general type is called upcasting.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. downcasting
- C. interfacing
- D. flexing

Answer: A

Explanation: Casting up a hierarchy means casting from a derived object reference to a base object reference.

Question No : 244 - (Topic 2)

In your student directory database, the Students table contains the following fields:

firstName

lastName

emailAddress

telephoneNumber

You need to retrieve the data from the firstName, lastName, and emailAddress fields for all students listed in the directory. The results must be in alphabetical order according to lastName and then firstName.

Which statement should you use?

- A.

```
SELECT firstName, lastName, emailAddress
      FROM Students BY lastName, firstName
```
- B.

```
SELECT firstName, lastName
      FROM Students
      ORDER BY lastName, firstName, emailAddress
```
- C.

```
SELECT firstName, lastName, emailAddress
      FROM Students
      SORT BY lastName, firstName
```
- D.

```
SELECT firstName, lastName, emailAddress
      FROM Students
      ORDER BY lastName, firstName
```

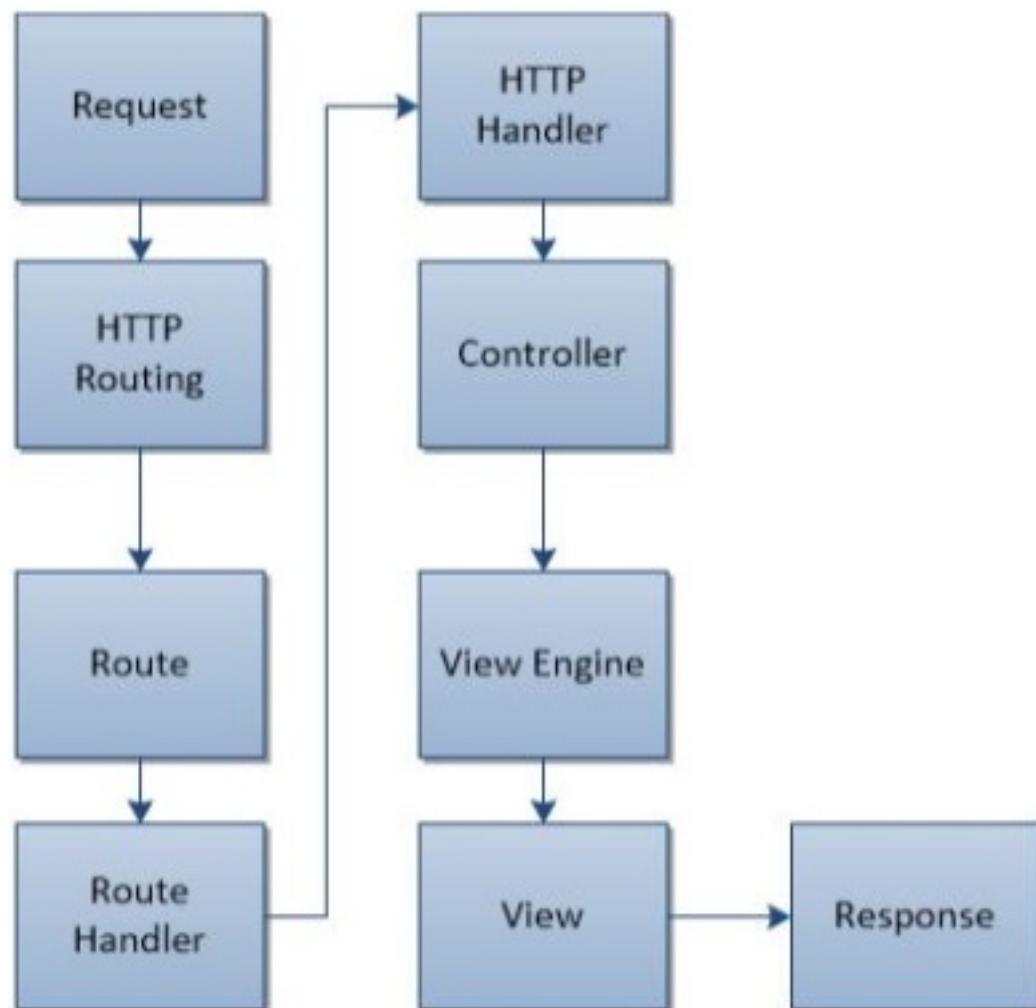
- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: D

Explanation: to sort use: ORDER BY LastName, FirstName

Question No : 245 HOTSPOT - (Topic 2)

The ASP.NET MVC page lifecycle is shown in the following graphic:



Use the drop-down menus to select the answer choice that completes each statement
Each correct selection is worth one point.

Answer Area

The **[answer choice]** event determines which action method is needed and then calls that method.

The URL pattern is matched during the **[answer choice]** event.

Answer Area

The **[answer choice]** event determines which action method is needed and then calls that method.

View
Route
Controller
HTTP Handler

The URL pattern is matched during the **[answer choice]** event.

View
Route
Controller
HTTP Handler

Answer:**Answer Area**

The **[answer choice]** event determines which action method is needed and then calls that method.

View
Route
Controller
HTTP Handler

The URL pattern is matched during the **[answer choice]** event.

View
Route
Controller
HTTP Handler

Question No : 246 - (Topic 2)

You plan to create an application for your company. The application will run automated routines and write the results to a text-based log file. Little or no user interaction is required.

Security requirements on the host computers prevent you from running applications on

startup, and users must be able to see the status easily on the screen. The host computers also have limited memory and monitors that display only two colors. These computers will have no network connectivity.

Which type of application should you use for this environment?

- A. Windows Store app
- B. console-based
- C. DirectX
- D. Windows Service

Answer: B

Explanation: Building Console Applications

Applications in the .NET Framework can use the System.Console class to read characters from and write characters to the console. Data from the console is read from the standard input stream, data to the console is written to the standard output stream, and error data to the console is written to the standard error output stream.

Question No : 247 HOTSPOT - (Topic 2)

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Test Behavior

Yes

No

The primary goal of unit testing is to take the smallest piece of testable software in the application, isolate it from the remainder of the code, and determine whether it behaves exactly as expected.

In unit testing, each unit is tested separately before integrating the units into modules to test the interfaces between modules.

The driver that you use in unit testing simulates a calling unit and the stub simulates a called unit.

Answer:**Answer Area**

Test Behavior

Yes

No

The primary goal of unit testing is to take the smallest piece of testable software in the application, isolate it from the remainder of the code, and determine whether it behaves exactly as expected.



In unit testing, each unit is tested separately before integrating the units into modules to test the interfaces between modules.



The driver that you use in unit testing simulates a calling unit and the stub simulates a called unit.

**Question No : 248 - (Topic 2)**

Which three phrases are advantages of connection pooling? (Choose three.)

- A. reduces load on the server
- B. improved performance
- C. reduces time to create a connection
- D. requires no configuration
- E. improved scalability

Answer: B,C,E

Explanation: B: In connection pooling, after a connection is created, it is placed in the pool and it is used over again so that a new connection does not have to be established.
E: Connection pooling often improves application performance, concurrency and scalability.
C: Connection pooling also cuts down on the amount of time a user must wait to establish a connection to the database.

Question No : 249 - (Topic 2)

You are developing a webpage that enables students to manage races.

The webpage will display two lists: past races and upcoming races. The page also contains a sidebar with contact information and a panel with social media settings that can be edited. Race results can be shared on social media.

How many components will be on the webpage?

- A. 2
- B. 3
- C. 4
- D. 5

Answer: C

Question No : 250 - (Topic 2)

Which function does Simple Object Access Protocol (SOAP) provide when using Web services?

- A. communications protocol
- B. model for describing Web services
- C. directory of registered Web services
- D. security model

Answer: A

Explanation: SOAP, originally defined as Simple Object Access Protocol, is a protocol specification for exchanging structured information in the implementation of web services in computer networks. It relies on XML Information Set for its message format, and usually relies on other application layer protocols, most notably Hypertext Transfer Protocol (HTTP) or Simple Mail Transfer Protocol (SMTP), for message negotiation and transmission.

Question No : 251 - (Topic 2)

You execute the following code.

```
For i = 0 to 100
    If I Mod 2 <> 0 Then
        Console.WriteLine("Hello")
    End If
Next
```

How many times will the word Hello be printed?

- A. 49
- B. 50
- C. 51
- D. 100

Answer: B

Explanation: The mod operator computes the remainder after dividing its first operand by its second. All numeric types have predefined remainder operators.

In this case the reminder will be nonzero 50 times (for i with values 1, 3, 5,..,99).

Question No : 252 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

The duplication of code so that modifications can happen in parallel is known as separating.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. branching
- C. merging
- D. splitting

Answer: B

Explanation: When you develop applications in a team-based environment, you might need to access multiple versions of your application at the same time. If you copy one or more areas of your code into a separate branch, you can update one copy while you

preserve the original version, or you can update both branches to meet different needs. Depending on your development goals, you can later merge the changes from multiple branches to create a single version that reflects all changes

Question No : 253 - (Topic 2)

How should you configure an application to consume a Web service?

- A. Add the Web service to the development computer.
- B. Add a reference to the application in the Web service.
- C. Add a reference to the Web service in the application.
- D. Add the Web service code to the application.

Answer: C

Explanation: Start by adding a Service Reference to the project. Right-click the ConsoleApplication1 project and choose “Add Service Reference”:

Question No : 254 - (Topic 2)

In the life cycle of an ASP. NET Web page, which phase follows the SaveStateComplete phase?

- A. Load
- B. Render
- C. PostInit
- D. PostBack

Answer: B

Explanation: The SaveStateComplete event is raised after the view state and control state of the page and controls on the page are saved to the persistence medium. This is the last event raised before the page is rendered to the requesting browser.

Question No : 255 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

The default entry point for a console application is the Class method.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. Main
- C. Program
- D. Object

Answer: B

Explanation: The default entry point for a console application is the Class Main.

Question No : 256 - (Topic 2)

The purpose of a constructor in a class is to:

- A. Initialize an object of that class.
- B. Inherit from the base class.
- C. Release the resources that the class holds.
- D. Create a value type.

Answer: A

Explanation: Each value type has an implicit default constructor that initializes the default value of that type.

Question No : 257 - (Topic 2)

What does the Console.Error property do within a console-based application?

- A. sets the standard error output stream
- B. gets the standard error input stream
- C. sets the standard error input stream
- D. gets the standard error output stream

Answer: D

Explanation: The Console.Error property gets the standard error output stream.

Question No : 258 - (Topic 2)

A table named Student has columns named ID, Name, and Age. An index has been created on the ID column.

What advantage does this index provide?

- A. It reorders the records alphabetically.
- B. It reorders the records numerically.
- C. It speeds up query execution.
- D. It minimizes storage requirements.

Answer: C

Explanation: Faster to access an index table.

Question No : 259 - (Topic 2)

You are migrating several HTML pages to your website. Many of these pages contain HTML <center> and tags.

Which XHTML document type declaration should you use?

- A. <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
- B. <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Frameset//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-frameset.dtd">
- C. <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">
- D. <!DOCTYPE html>

- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

Explanation: The <!DOCTYPE> declaration is not an HTML tag; it is an instruction to the web browser about what version of HTML the page is written in.

XHTML 1.0 Transitional

This DTD contains all HTML elements and attributes, INCLUDING presentational and deprecated elements (like font). Framesets are not allowed. The markup must also be written as well-formed XML.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

Question No : 260 - (Topic 2)

Which language uses Data Definition Language (DDL) and Data Manipulation Language (DML)?

- A. Java
- B. C +
- C. SQL
- D. Pascal

Answer: C

Explanation: SQL uses DDL and DML.

Question No : 261 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

To improve performance, a SQL SELECT statement should use indexes.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. joins
- C. grouping
- D. ordering

Answer: A

Question No : 262 - (Topic 2)

The Dog class and the Cat class inherit from the Animal class. The Animal class includes a breathe() method and a speak() method. If the speak() method is called from an object of type Dog, the result is a bark. If the speak() method is called from an object of type Cat, the result is a meow.

Which term is used to describe this object-oriented concept?

- A. multiple inheritance
- B. encapsulation
- C. polymorphism
- D. data hiding

Answer: C

Explanation: Polymorphism is often referred to as the third pillar of object-oriented programming, after encapsulation and inheritance. Polymorphism is a Greek word that means "many-shaped" and it has two distinct aspects:

* At run time, objects of a derived class may be treated as objects of a base class in places such as method parameters and collections or arrays. When this occurs, the object's declared type is no longer identical to its run-time type.

* Base classes may define and implement virtual methods, and derived classes can override them, which means they provide their own definition and implementation. At run-time, when client code calls the method, the CLR looks up the run-time type of the object, and invokes that override of the virtual method. Thus in your source code you can call a method on a base class, and cause a derived class's version of the method to be executed.

Question No : 263 - (Topic 2)

You create an object of type ANumber. The class is defined as follows.

```
Public Class ANumber
    Private _number As Integer = 7
    Public Sub New ()
        End Sub
        Public Sub New (ByVal number As Integer)
            _number = number
        End Sub
    End Class
```

The code is executed as follows.

```
Dim mynumber As ANumber = new ANumber(3);
```

What is the value of `_number` after the code is executed?

- A. Null
- B. 0
- C. 3
- D. 7

Answer: C

Question No : 264 - (Topic 2)

You are developing an application that tracks tennis matches. A match is represented by the following class:

```
Public Class Match
    Public Property Location As String
    Public Property MatchDate As Date?

    Public Sub New()
        Location = "unknown"
    End Sub

End Class
```

A match is created by using the following code:

```
Dim match = New Match With
    {.Location = "north region",
    .MatchDate = New DateTime(2013, 4, 14)}
```

How many times is the Location property on the newly created Match class assigned?

- A. 0
- B. 1
- C. 2
- D. 3

Answer: C

Question No : 265 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

The process of transforming compiled C# code into an XML string for a web service is known as deserialization.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. serialization
- C. decoding
- D. encoding

Answer: B

Explanation: Serialization is the process of converting an object into a stream of bytes in order to store the object or transmit it to memory, a database, or a file. Its main purpose is to save the state of an object in order to be able to recreate it when needed.

Serialization allows the developer to save the state of an object and recreate it as needed, providing storage of objects as well as data exchange. Through serialization, a developer can perform actions like sending the object to a remote application by means of a Web Service, passing an object from one domain to another, passing an object through a firewall as an XML string, or maintaining security or user-specific information across applications.

Question No : 266 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

Unit testing is the final set of tests that must be completed before a feature or product can be considered finished.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. User acceptance
- C. System
- D. Integration

Answer: B

Explanation: User acceptance testing (UAT) is the last phase of the software testing process. During UAT, actual software users test the software to make sure it can handle required tasks in real-world scenarios, according to specifications.

UAT is one of the final and critical software project procedures that must occur before newly developed software is rolled out to the market.

UAT is also known as beta testing, application testing or end user testing.

Question No : 267 - (Topic 2)

Your application must pull data from a database that resides on a separate server.

Which action must you perform before your application can retrieve the data?

- A. Establish a connection to the database by using the appropriate data provider.
- B. Create a routine that bypasses firewalls by using Windows Management Instrumentation (WMI).
- C. Install the database on each client computer.
- D. Configure the network routers to allow database connections.

Answer: A

Question No : 268 - (Topic 2)

You create an object of type ANumber. The class is defined as follows.

```
Public Class ANumber
    Private _number As Integer = 3

    Public Sub New()
    End Sub

    Public Sub New(number As Integer)
        _number = number
    End Sub

End Class
```

The code is executed as follows.

```
Dim myNumber As New ANumber(7)
```

What is the value of number after the code is executed?

- A. Null
- B. 0
- C. 3
- D. 7

Answer: D

Question No : 269 - (Topic 2)

Your database administrators will not allow you to write SQL code in your application.

How should you retrieve data in your application?

- A. Reference an index in the database.
- B. Call a stored procedure.
- C. Query a database view.
- D. Script a SELECT statement to a file.

Answer: B

Explanation: The SQL will only be inside the stored procedure.

Question No : 270 - (Topic 2)

A class named Manager is derived from a parent class named Employee. The Manager class includes characteristics that are unique to managers.

Which term is used to describe this object-oriented concept?

- A. inheritance
- B. data modeling
- C. data hiding
- D. encapsulation

Answer: A

Explanation: Classes (but not structs) support the concept of inheritance. A class that derives from another class (the base class) automatically contains all the public, protected, and internal members of the base class except its constructors and destructors.

Incorrect:

not D: *Encapsulation* is sometimes referred to as the first pillar or principle of object-oriented programming. According to the principle of encapsulation, a class or struct can specify how accessible each of its members is to code outside of the class or struct. Methods and variables that are not intended to be used from outside of the class or assembly can be hidden to limit the potential for coding errors or malicious exploits.

Question No : 271 - (Topic 2)

This question requires that you evaluate the underlined text to determine if it is correct.

The Response.Redirect method is used to transfer processing of the current page to a new page, and then return processing back to the calling page once processing of the new page has completed.

Select the correct answer if the underlined text does not make the statement correct. Select "No change is needed" if the underlined text makes the statement correct.

- A. No change is needed
- B. Server.Transfer method
- C. Server.Execute method
- D. meta http-equiv="refresh" tag

Answer: C

Explanation: The Execute method calls an .asp file, and processes it as if it were part of the calling ASP script. The Execute method is similar to a procedure call in many programming languages.

Incorrect:

* Response.Redirect Method

The Redirect method causes the browser to redirect the client to a different URL.

- * The Server.Transfer method sends all of the information that has been assembled for processing by one .asp file to a second .asp file.

Question No : 272 - (Topic 2)

What are two methods that can be used to evaluate the condition of a loop at the start of each iteration? (Each correct answer presents a complete solution. Choose two.)

- A. For
- B. Do... While
- C. If
- D. While

Answer: A,D

Explanation: For and While constructs check at the start of each iteration.

Question No : 273 - (Topic 2)

You run the following code:

```
Dim a As Integer = 10
Dim b As Integer = 20
Dim c As Integer = 30
Dim result As Integer = 0

If a <= b Or c > a Then
    result = 10
ElseIf a <= b Or c <= a Then
    result = 20
Else
    result = 30
End If
```

What is the value of result when the code has completed?

- A. 0
- B. 10
- C. 20
- D. 30

Answer: B

Explanation: The conditional-OR operator (||) performs a logical-OR of its bool operands. If the first operand evaluates to true, the second operand isn't evaluated. If the first operand evaluates to false, the second operator determines whether the OR expression as a whole evaluates to true or false.

Question No : 274 HOTSPOT - (Topic 2)

You have a base class named Tree with a friend property named color and a protected property named NumberOfLeaves. In the same project, you also have a class named Person.

For each of the following statements, select Yes if the statement is true. Otherwise, select No. Each correct selection is worth one point.

Answer Area

Description of Behavior	Yes	No
Methods in the Person class can access the color property.	<input type="radio"/>	<input type="radio"/>
Methods in the Person class can access the NumberOfLeaves property.	<input type="radio"/>	<input type="radio"/>
Methods in the Tree class can access all private properties in Person.	<input type="radio"/>	<input type="radio"/>

Answer:

Answer Area

Description of Behavior	Yes	No
Methods in the Person class can access the color property.	<input checked="" type="radio"/>	<input type="radio"/>
Methods in the Person class can access the NumberOfLeaves property.	<input type="radio"/>	<input checked="" type="radio"/>
Methods in the Tree class can access all private properties in Person.	<input type="radio"/>	<input checked="" type="radio"/>

Question No : 275 - (Topic 2)

You are creating an application for a help desk center. Calls must be handled in the same order in which they were received.

Which data structure should you use?

- A. Queue
- B. Hashtable
- C. Stack
- D. Binary tree

Answer: A

Question No : 276 - (Topic 2)

You are building a web application that enables international exchange students to schedule phone calls with their prospective schools.

The application allows students to indicate a preferred date and time for phone calls. Students may indicate no preferred time by leaving the date and time field empty. The application must support multiple time zones.

Which data type should you use to record the student's preferred date and time?

- A. uLong?
- B. DateTimeOffset?
- C. SByte
- D. Date

Answer: B

Explanation: datetimeoffset: Defines a date that is combined with a time of a day that has time zone awareness and is based on a 24-hour clock.

Incorrect:

Date: Defines a date.

sByte: The **sbyte** keyword indicates an integral type that stores values in the range of -128 to 127.