2 marks:

1. Write the usage of <DIV> tag with style attribute.

->The tag defines a division or a section in an HTML document. The tag is used as a container for HTML elements.The tag is easily styled by using the class or id attribute

- *align (alignment)*
- *lang (language information,*
- *dir (text direction)*
- *title (element title)*
- *style (inline style information)*

2. List any two differences between ASP and ASP.NET

ASP	***ASP.NET***
ASP code is mixed with HTML code. Unstructured and difficult to understand	***Supports separation of code and content***
Platform dependence	***Platform independence***
No backward compatibility	***Maintains backward compatibility with earlier versions***
File extension is .asp	***File extension is .aspx***
Supports only scripting languages like javascript or vbscript	***ASP.NET applications can be developed using any of the .NET compatible programming Languages***

3. Write the usage of <SPAN> tag with style attribute.

->The tag is an inline container used to mark up a part of a text, or a part of a document.The tag is much like the element, but is a block-level element and is an inline element.

A style attribute on a tag assigns a unique style to the element.

3. Write any two advantages of HTML5 over HTML4. [any 2]

- *Audio and video streaming support*
- *Advanced UI componenets*
- *Cross platform device support*
- *Cleaner code*
- *Enhanced Accessibility*

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4. What is ASP.NET?

->ASP.NET is the latest version of ASP(Active Server Pages). ASP is a server side web technology for building dynamic, interactive and database driven web sites. It is a product of Microsoft and one of the most popular technologies for developing web applications and web sites. ASP.NET is an unified web platform that provides all the services necessary for you to build enterprise class applications.

5. Name any four validation controls. [any 4]

- ***RequiresFieldValidator***
- ***CompareValidator***
- ***RangeValidator***
- ***RegularExpressionValidator***
- ***CustomValidator***
- ***ValidationSummary***

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6. What is XML? Why it is so called?

->XML stands for Extensible Markup Language. XML is a markup language much like HTML. XML was designed to store and transport data. XML was designed to be self-descriptive.

7.How do you invoke method in c# ?

->Invoking an instance method requires that you instantiate an object and call the method on that object

Example:

```
public class SquareExample
{
    public static void Main()
    {
        int num = 4;
        int product = Square(num);//method invokation
    }

    static int Square(int i)//method declaration
    {
        int input = i;
        return input * input;
    }
}
```

**9.Difference between
 and <P> tag.**

***->
 tag It is used for breaking line and moving to the same line in the same paragraph.***

P tag- It is used for changing paragraphs and starting a new paragraph just after it.

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10. What are the advantages of using Style Sheets?

- *It is possible to create classes for use on multiple tag types in the document.*
- *Under complex situations, selector and grouping methods can be used to apply styles.*
- *No extra download is required to import the information.*

11. Write any 2 new inline elements used in HTML 5 with its purpose.

-><mark>: The <mark> tag in HTML is used to define the marked text. It is used to highlight the part of the text in the paragraph.

*Eg:- Do not forget to buy <mark>milk</mark> today. *

<time>: The <time> tag is used to display the human-readable data/time. It can also be used to encode dates and times in a machine-readable form.

*Eg:- Open from <time>10:00</time> to <time>21:00</time> every weekday. *

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12. What are Panel Controls? Why it is used?

->This control creates a borderless division on a web form which serves as a container for other controls. This control is often used to generate controls by code and to display and hide groups of controls.

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13. How do you define constants in C#?

->Constant member:

Constants are immutable values which are known at compile time and do not change for the life of the program. Constants are declared with the const modifier. Only the C# built-in types (excluding System.Object) may be declared as const.

Example:-class Calendar1

{

public const int Months = 12;

}

In this example, the constant Months is always 12, and it cannot be changed even by the class itself.

14. List any four relational operators used in C#, with their purpose.

Relational Operators:-Comparisons can be done using relational operators. A relational expression
contains a combination of arithmetic expressions, variables or constants along with relational operators. A
relational expression can contain only two values i.e. true or false. When the expression is evaluated as
true then the compiler assigns a non zero value and 0 otherwise

- *< less than*
- *> greater than*
- *<= lesser than or equals to*
- *>= greater than or equals to*
- *== equals to*
- *!= equals to*

---

15. Why do you alias namespace with class in C#? Give an example.

->Namespace Alias Qualifier(::) makes the use of alias name in place of longer namespace and it provides a way to avoid ambiguous definitions of the classes. It is always positioned between two identifiers.

Example:

```
using C = System.Console;
class Program
  {
    static void Main(string[] args)
    {
        C. WriteLine("I'm coming from the System namespace");
        C.Write("Say something nice:");
        var said = C.ReadLine();
     }
}
```

16.What are Static constructors?

->A static constructor is used to initialize any static data, or to perform a particular action that needs to be performed only once. It is called automatically before the first instance is created or any static members are referenced. A static constructor will be called at most once.

16.Name the different types of list.

->There are three types of lists in HTML:

- ***Unordered list or Bulleted list (ul)***
- ***Ordered list or Numbered list (ol)***
- ***Description list or Definition list (dl)***

17. Write the purpose of any two attributes <IMG> tag.

-> <IMG> tag is used to insert images in any webpage. Its two main attributes are as follows: SRC: It specifies the URL of the image. ALT: It specifies an alternate text for an image.

17.How do you create canvas in HTML5 ? Give an example.

->HTML <canvas> element is used to draw graphics on a web page.

Eg:- <canvas id="myCanvas" width="200" height="100"></canvas>

18.List any four WebServer Controls.

->There are four types of web controls. They are

- ***Web server controls***
- ***Validation web controls***
- ***Data controls***
- ***Rich web control***

19.What is WSDL?

WSDL stands for Web Services Description Language. It is the standard format for describing a web service. WSDL was developed jointly by Microsoft and IBM.

20.What is a thread? Write the different thread states.

A thread is defined as the execution path of a program. Each thread defines a unique flow of control.

- ***Unstarted.***
- ***Runnable (Ready to run)***
- ***Running.***
- ***Not Runnable.***
- ***Dead (Terminated).***

21.Write the difference between boxing and unboxing.

->Boxing means the conversion of a value type on the stack to a object type on the heap.

```
int m=100;
object om= m; // creates a box to hold m
  Conversely, the
conversion from an object type back to a value type is known as unboxing.
int m=10;
object om = m; // box m int
```

22.What is the use of 'this' keyword?

->The this keyword refers to the current instance of the class and is also used as a modifier of the first parameter of an extension method.

Example:

```
public Employee(string name, string alias)
{
// Use this to qualify the fields, name and alias: this.name = name;
this.alias = alias;
```

}

23.Name the tag used for rolling display in HTML. Write any two attributes and use of it.

->The <marquee> tag in HTML is used to create scrolling text or image in a webpages. It scrolls either from horizontally left to right or right to left, or vertically top to bottom or bottom to top.

bgcolor: It gives background color.

direction:Define the direction of scrolling the content.

---

23. Differentiate inline and embedded styles.

->Inline styles are those that are used as part of the HTML tag itself. Embedded styles are located in the header of a page, and apply to that entire page.

24.What is WAI-ARIA? What is its purpose?

->WAI-ARIA, the Accessible Rich Internet Applications Suite, defines a way to make Web content and Web applications more accessible to people with disabilities. It especially helps with dynamic content and advanced user interface controls developed with HTML.

25.What are the different options used to specify the *RepeatLayout property:-*

This attribute specifies whether the table tags or the normal html flow to use while
formatting the list when it is rendered. The default is Table.

- *Flow- Items are displayed without a table structure. Rendered markup consists of*
  a span element and items are separated by br elements.

- *OrderedList- Items are displayed without a table structure. Rendered markup consists of an ol element that contains li elements. This value is new as of ASP.NET 4 and is a valid option only for the CheckBoxList and RadioButtonList controls.*

- *Table- Items are displayed in a table. This option causes the control to render HTML that might not conform to accessibility standards. For more information, see Accessibility in Visual Studio and ASP.NET.*

26.What is DTD? List the types.
->A Document Type Definition (DTD) describes the tree structure of a document and something about its data. there are two types: internal and external.

27.Write the syntax of creating Web Server Control. Give example.
<asp:button attributes runat="server" id="Button1" />.

28.What is "fall through" in switch? How it is achieved in C# ?
->Fallthrough in switch statement In C# programming language, In absence of the break statement in a case block, if the control moves to the next case block without any problem it is known as 'falthrough'. Falthrough is permitted in c, c++, and java. The C# does not permit automatic falthrough, if the case block contains executable code. However, it is allowed if the case block is empty. For example: if we want to consecutive case block to be executed continuously, we have to force the process by using goto statements. The above code can be written like this,
switch(m) { case 1: x=y;
goto case 2;

case 2: x=y+1;
goto default;
default: x=y + m; break; }

---

29. What is delegate? Why it is used?
->A delegate is a type that represents references to methods with a particular parameter list and return type. When you instantiate a delegate, you can associate its instance with any method with a compatible signature and return type. You can invoke (or call) the method through the delegate instance

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30. Write any two characteristics of ASP.NET
->• The ASP.NET page framework is a programming framework that runs on a web server to produce and manage ASP.NET web form pages dynamically
• These pages are extensions of standard HTML forms. They render dynamic, interactive and
database driven content.

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31. What are HTML tags?
->HTML tags are like keywords which defines that how web browser will format and display the content.

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32. How do you declare DOC TYPE in HTML5? What is its purpose?
->the DOCTYPE declaration refers to a document type definition
syntax:
<!DOCTYPE html>
The DOCTYPE declaration is an instruction to the web browser about what version of HTML the page is written in.

---

33. explain the following ADO.NET objects. [any 2]
• Connection objects – Connects to the database. A data adapter is needs a connection to a data

source to read and write data. For this purpose, it uses OledbConnection, OdbeConnection, OracleConnection, or SQLConnection to communicate with the data source.

• DataAdapter object – Enables the user to communicate with the data source and the data set. We can configure a data adapter with SQL to execute against the data source. The available data adapters are OledbAdapter, OdbcAdapter, OracleDataAdapter, AccessDataAdapter and SQLDataAdapter

• Command Object – Requires reading, adding, updating and deleting records in a data source. For each of these operations, the data adapter contains a command object. Data adapters support four types of command objects: SelectCommand, InserttCommand, UpdateCommand and DeletetCommand.

• DataSet Object – Stores data in a disconnected cache. The structure is similar to that of relational databases. It represents a complete set of data including related tables, constraints and relationships. Datasets are supported with DataSet objetcs
• DataTable Object – Used to store a data table from a dataset. DataTable object contains two important properties, namely Columns and Rows. The Columns property is a collection of DataColumn objects that represent the columns of data in a table. The Rows property is a collection of DataRow objects that represent the rows of data in a table.
• DataReader Object – Holds a read-only or forward only set of data from a database. The use of this object can increase the speed with which data is retrieved from the database, as only one row will remain in the memory at a time.
• DataView Object – Represents a customized view of a single table that can be filtered, searched or sorted. A dataview

supported by the DataView class is a data snapshot that takes up few resources

• Constraint Object – Checks data integrity. A constraint supported by the Constraint class is a rule that can be used when rows are inserted, updated or deleted to check the affected table after performing
the operation.

• DataRelation Object – Specifies a relation between the parent and the child tables based on a key that is shared by both the tables

• DataRow Object – Corresponds to a particular row in a data table. We can use the item property to get or set a value in a particular field in a row

• DataColumn Object – Represents the columns in a table. Each object has a DataType property that specifies a kind of data each column contains such as integers or string values

---

33.Differentiate between value type and reference types.
->Variables of reference types store references to their data (objects), while variables of value types directly contain their data.

34.What are Command line arguments? Give example.
->Arguments that are passed by command line known as command line arguments. We can send arguments to the Main method while executing the code. The string args variable contains all the values passed from the command line.
using System;
Example:-

```
class Program
{
    static void Main(string[] args)
    {
        Console.WriteLine("Argument length: "+args.Length);
        foreach (Object obj in args)
```

```
        {
            Console.WriteLine(obj);
        }
    }
}
```

35.What are access modifiers? List three different access modifiers supported in PHP.

->Access modifiers.PHP uses access modifiers. They control the visibility of attributes and methods, and are placed in front of attribute and method declarations.

PHP supports the following three different access modifiers(Mention)

- *The default option is public, meaning that if you do not specify an access modifier for an attribute or method, it will be public. Items that are public can be accessed from inside or outside the class.*
- *The private access modifier means that the marked item can be accessed only from inside the class.*
- *The protected access modifier means that the marked item can be accessed only from inside the class. It also exists in any subclasses.*

36.How do you declare a constructor in PHP? Give an example

->Declaring A constructor is declared in the same way as other operations, but it has the same name as the class. Though we can manually call the constructor, its main purpose is to be called automatically when an object is created.

Example: The following code declares a class with a constructor

```
class classname
function classname ($param)
{
```

***echo "Constructor called with parameter". $param."
";***
}
}

---

37. Why do you need Prepared Statements? Give an example.
->The mysqli library supports the use of prepared statements. They are useful for speeding up
execution when we are performing large numbers of the same query with different data. They
also protect againstSQL injection-style attacks

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38. What are abstract classes in PHP? Give an example?
->PHP offers abstract classes, which cannot be instantiated, as well as abstract methods, which provide the signature for a method but no implementation.
For instance:
abstract operationX($param1, $param2);
Any class that contains abstract methods must itself be abstract, as shown in this example:
abstract class A
{
abstract function operationX($param1, $param2);
}

---

39. Write the purpose of dirname($path) and basename($path) functions.
->The dirname($path) functions return the directory part of the pathThe basename($path)function returns filename part of the path

---

40. How do you test and set variable types? Explain with an example for each.
->Testing and Setting Variable Types
Most of the variable functions are related to testing the type of function. The two most general are

gettype() and settype().
gettype()
To use gettype(),pass a variable. It determines the type and returns a string containing the type name:
bool, int, double (for floats), string, array, object, resource, or NULL. It returns unknown type if it is not one
of the standard types.
Syntax:
string gettype(mixed var);
settype().
To use settype(), pass a variable for which you want to change the type and a string containing the new
type for that variable from the previous list.
Syntax:
bool settype(mixed var, string type);