A. Short Type Questions :-

A1. What are Asp.Net Web forms.

Ans. ASP.NET Web forms is a web application framework & one of several programming models supported by Microsoft ASP.Net technology. Web forms application can be written in any programming language which supports the Common Language Runtime, such as C# or Visual Basic. Web Forms application simplify web development to the point that it becomes as easy as dragging & dropping controls onto a designer to design interactive web application that span client to server.

A2. What is Assembly & what its advantage in ASP.Net.

Ans An Assembly in the Common Language Infrastructure is a compiled code library used for deployment, versioning & security, reuse, activation scoping.

Advantages of Assembly in ASP.Net.

*. Assemblies are designed to simplify application development & to solve versioning problems that can occur with component based application.

*. Many development problems have been solved by the uses of assemblies in the .Net. Because they are self-describing components that have no dependencies on registry entries, assemblies enable zero-impact application installation.

A3. State the difference b/w checkboxlist control & checkbox control.

Ans.

* Checkbox Control :- The checkbox control is a single check box that you can work with. checkbox provide you with independent choices or option that you can select.
* Checkboxlistcontrol :- The checkboxlist control is a collection of several checkboxes. After you add the Checkbox list control, you need to add a list of items.

A4. Define Methods & Event with example.

Ans.. * A method is a block of code which only runs when it is called. Methods are used to perform certain actions, & they are called function. You can pass data, known as parameter, into a method.

Example :-

```
class program.
{
    static void MyMethod()
    {
        // code to be executed
    }
}
```

* Event :- An event is an action or occurence such as mouse click, a key press or any system generated notification. Events in ASP.Net raised at the client machine & handled at the server. For example a user clicks a button displayed in the browser. A click event is raised. The browser handles this client side event by posting it to the server.

The general syntax of an event is:
private void Event Name (object sendar, EventArgs e);

A5. What datatypes does the Range Validator control support.
Ans The Range Validator control supports integer, String Date, Double.

B Essay type Question :-

B1. Explain the following controls :-
a) listbox
b) Calender Control.
c) Treeview Control
d) Hyperlink control.

Ans. **listbox Control :-** The listbox control is a list of predefined items & allows users to select one or more items from the list. The list box control is collection of items. The individual item can be added by using the items property of the listboxcontrol.

Properties of the listbox Control.

1	Items	Represent the collection of list items in list box Each item has three prop. Text, Value & selected.
2.	Width	Represent the size of listbox control & take value in pixels.

Height	Represents the vertical size of the list box control & store value in pixels.
Selection Mode	Represents the number of items that can be selected. To allow users to selected only one item. Set the selection mode property list selection mode. single & other is multiple selection mode.

* Hyperlink control :- The hyperlink control creates links on web pages & allow users to navigate from one page to another in a application or an absolute URL. You can use text or an image to act a a link in a Hyperlink control.

Properties of the Hyperlink control :-

Property	Description
Text	Represents the text displayed as link.
ImageUrl	Represents the image displayed as a link. The image file should be save in some application software project.
Navigate Url	Represents the URL of the target page.

* Calender Control :- The calender control is used to display a one-month ~~control~~ calendar. Users can use this control to view dates or select a specific da , week, or month

Properties of the Calendar Control:

Property	Description
Cell padding	Specifies the space tw cells.
Cell spacing	Specifies the spaces.
Day Name format	Specifies the format f the day name.
first Day of Week	Set a value for the day of the week that will be displayed in calendar first column.
Selected date	Represents the date selected in the calend control.
Selection Mode	Specifies whether the user can select a day week, or moth. The Default is Day.

*. TreeView Control :- The tree View control is used to present hierarchical data to users in the window Explorer-style format, wherein the items can be expanded & collapsed. This control Each node may contain one or more child nodes.

Properties of the Tree View Control:

Property	Description
AutoPostBack	Takes a Boolean value & indicates whether or not the control posts back to the server on each client request.
DefaultStyle	Set a default style for the elements in the tree.
ExpandedImageURL	Sets an image to be displayed when a node is expanded.
ImageURL	Sets a image to be displayed to represents a node.
ShowLines	Takes a Boolean value & indicates whether or not lines are used to connect the nodes in the tree.

B2. What is Advertisement file? Explain how AdRotator control is used with suitable example.

Ans. Advertisement file :- The Advertisement file property represents the path to an Advertisement file. The Advertisement file is a well-formed XML document that contains information about the image to be displayed for advertisement & the page to which a user is redirected when user clicks the banner ad image.

Syntax of Advertisement file :-

```
<Advertisements>
  <Ad>
    <ImageUrl> URL of the image to display </ImageUrl>
    <NavigateUrl> URL of the page to navigate to </NavigateUrl>
    <AlternateText> Text to be displayed as Tool </AlternateText>
    <Keyword> Keyword used to filter </Keyword>
    <Impressions> relative weighting of ad </Impression>
  </Ad>
</Advertisements>
```

Ad rotator control is used to display flashing ads, such as banner ads & news flashes on web pages. The control is capable of displaying ads randomly.
The Ad rotator control uses an Advertisement file named.
Ads.xml

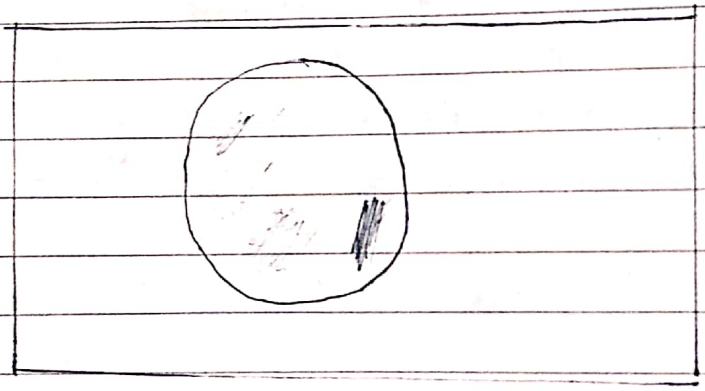
```
<%@ Page Language = "VB" %>
<html>
  <head>
  </head>
  <body>
  <form runat = "server">
  <h3> Ad Rotator Example </h3>
  <asp : AdRotator id = "AdRotator1" runat = "server"
    AdvertisementFile = "Ads.xml" />
  </form>
  </body>
</html>
```

The following code describes the Ads.xml that is used by the AdRotator control.

```
<Advertisements>
<Ad>
<Image Url> moon.jpg </Image Url>
<Navigate Url> http://www.moon.com </Navigate Url>
<Alternate text> Moon Explores web sites </Alternate Text>
<Impressions> 1 </Impression>
<Keyword> Moon </Keyword>
</Ad>
</Advertisements>
```

Output :-

Ad Rotator Example.



B3. Explain all the Validation controls used in Asp.net with proper example.

Ans * Required field Validator Control :- Use the Required field validator control when a value is required for an input element on the web page. This control checks whether the value of the associated input control is different from its initial value. You can easily convert the previous sample ASP code into .net with Required field validator control.

```
<!-- Required field Validator -->
First <br>
<asp: textbox id = "first" maxlength ="20" runat="server"/>
<asp: requiredfield validator
    id = "rfv first"
        Control to validatate = "first"
        display = "dynamic"
        error message = "Please enter your name"
        run at = "server" >
    </asp: requiredfieldvalidator>
    <br>
```

output

First [ ]

[validate]

Now Before entering a first name, click the validate button. output is Please enter your name

Now you enter the name then click the button This time you should see the message, "Hellow, kulde displayed on the page

Properties of Requiredfield Validatorcontrol:

Property	Definition
ID	This property gets or set the identifier for the control
Control to Validate	Gets or sets the name of the control to validate.

Display	Gets or set the display appearance of the validator control on the web pages.
Error Message	Get or set the error message displayed for this control.

* Compare Validator Control :- Use the Compare Validar control to make sure that a value matches a specified value. This control compares the value of an input to another input or a constant value using a variety of operators & types.

```
<!-- Compare Field Validator -->
Password: <br>
<asp: textbox id = "password" maxlength = "16"
    runat = "server" /> <br>
Confirm: <br>
<asp: textbox id = "Confirm" maxlength = "16"
    runat = "Server" />
<asp: Compare validar
  id = "CV passwords"
    control to compare = "password"
    Control to validate = "Confirm"
    display = "dynamic"
    error message = "Passwords do not match try again"
    runat="server" />
</asp: compare validator>
```

output :-

Password

Confirm

validate

Now, if we click the validator button error message doesnot show on the page because meanig neithe password nor Confirm is required value.
Now, if both the values are different then error message show on the page " password do not match please try again.
If both the values are compares perfectly then displayed a message " Your password is Regsuther

Range Validar Control :- Use the Range Validate Control to determine wheather a value falls within the specified range. It checks wheather the values of the associated input control is within some minimum, maximum, which can be constant value or the value of another Control.

```
<!-- Range Validator Control -->
Number of tickets <br>
<asp: textbox id = "Tickets" maxlength = "2" Column="2"
        runat = "server" />
```

```
<asp: rangevalidator
  id = "rvTickets"
  controltovalidate = "Tickets"
  minimumvalue = 1
  maximumvalue = 4
  type = "integer"
  display="dynamic"
  errormessage = "You can only purchase 1 to 4 tickets
  runat = "server"
</asp: rangevalidator> <br>
```

Output:-

Number of tickets

[ ]

Validate

Now if we enter value greater than 4 then error message is displayed on the page "You can only purchase 1 to 4 tickets.

If we enter value 4 then displayed the message on the page "you purchased tickets."

Regular Expression Validator Control:- Use the Regular Expression Validator control to check a value against a regular. It checks whether the value of the associated input control matches the patter of the regular expression.

```
<!-- Regular Expression -->
Phone <br>
<asp:textbox id = "phone" maxlength = "12" columns = "12"
        runat = "server"/>
<asp: regularexpression Validator
    id = "revphone"
    Control to validate = "phone"
    display = "dynamic"
    Validation expression = " [0-9]{3}\s [0-9]{3}-[0-9]{4}"
    error message = "phone number format must be xxx xxx-xxx
    runat = "server" >
</asp: regularexpression validator > <br>
```

output :-

Phone

[ ]

[Validate]

Now, Because the format in your Validation Expression is xxx xxx - xxxx, enter some other phone sequence to test the validation control

Now, if the no. is not in the format then Error message is displayed on the page

" phone number format must be xxx xxx - xxxx

& if no. are in the format of Validation Expression then show you can reached at 8350243266

* Custom Validator Control:- Use the Custom Validator Control to perform user-defined custom validation. This control allows custom code to perform validation on the client & or server.

```
<!-- Custom Validator Control -->
Credit card number <br>
<asp: textbox id = "card no." maxlength = "16" Column="16"
        run at = "Server" />

<asp: custom validator
  id = "CV card no."
ControlToValidate = "card no."
 Client Validation function = "Is card Valid"
 display = "dynamic"
 error message = "Invalid credit card number, please try"
 runat = "server" >
</asp: custom validator > <br>
```

Now, Iscard function, which must be a valid function defined as Jscript or VB script on the Client.

```
< Script language = "javascript">

 function IscardValid ( source, value ) {
  if (value != "5555555555555556")
      return false;
  else
      return true;
  }
 </script>
```

output :-

Credit Card number

[ ]

[validate]

if, Entered value is not valid as per the Is Card function then Error message is displayed " Invalid card number, Plz try again"

& if Entered value is valid then showed the card number on the page " your card number is 5555 5555 5555 5555

By. What is Debugging? Discuss the method of Debug the ASP.net application.

Ans. while you are developing the application, the code editor catches most syntax errors, However, the errors that cannot be caught during application development cause the application to display error message at run time. The errors that occur while the application is running are called run-time errors. On the other hand, if there is a problem in the programming logic, the app. would run without errors, but it will not provide the desired functionality. Such errors are called logical errors. The process of going through the code to identify the root cause of an error in an app is called Debugging.

Error Handling :- ASP.net provides rich support for handling & tracking errors that might occur while application are running. When you run ASP.net application, if an error occur on a server, an HTML page is generated & displayed in the browser & while displaying error messages to users. ASP.Net takes care of the security issues by default, which makes it a reliable development tool for web application. ASP.net ensures that no secure information, is revealed on the client.

Using custom error pages :- An HTML errors page is displayed to a user in case an error on a server. These error messages are secure, because they do not leak any secret information.

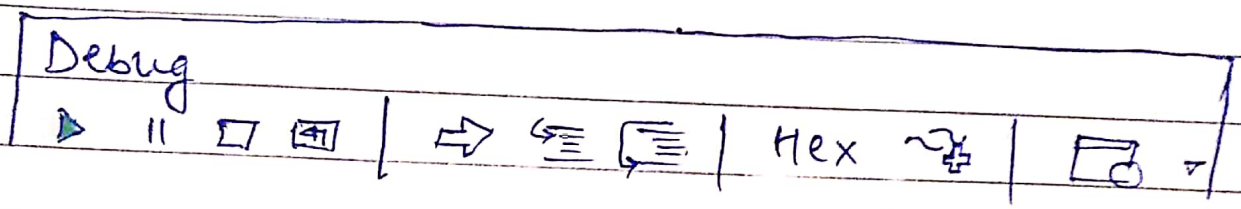
Tracking errors :- In addition to display error messages to error messages to users in case error occur on a server, you should ensures that the administrator & developers are also able to track errors. This would allow them to identify & solve the problem associated with the code.

* When the site is executed for the first time, Visual Studio display a prompt asking whether it should be enabled for debugging!

When debugging is enabled, the following lines of code are showed in web.config :

```
<system.web>
  <compilation debug = "true" >
    <assemblies >
      . . . . . .
    </assemblies>
  </compilation>
</system.web>
```

The Debug toolbar provides all the tools available for debugging.



Breakpoints :- Breakpoints specifies the runtime to run a specific line of code & then step execution so that the code could be examined & perform various debugging jobs such as change the value of the variables, step through the codes, moving in & out of function & methods etc.