1. What is ASP?

ASP stands for Active Server Pages. It is also known as classic ASP. It is a server-side technology provided by Microsoft which is used to create dynamic and user-friendly web pages. It uses different scripting languages to create dynamic web pages which can be run on any browsers.

2. What is ASP.NET?

ASP.Net is a specification by Microsoft which is used to create web applications and web services. It is a part of ".Net framework". You can create ASP.Net applications in most of the .Net compatible languages like Visual Basic, C#, etc. ASP.Net provides much better performance than scripting languages.

3. What is the difference between the ASP and ASP.NET?

The main difference between ASP and ASP.Net is that ASP is interpreted, while ASP.Net is compiled. ASP uses VBScript, therefore when the ASP page is executed, it is interpreted. On the other hand, ASP.Net uses .Net languages like C# and VB.NET, which is compiled to Microsoft intermediate language.

4. What is IIS?

IIS stands for Internet Information Services. It is created by Microsoft to provide Internet-based services to ASP.NET Web applications.

5. What is the usage of IIS?

Following are the main usage of IIS:

IIS is used to make your computer to work as a Web server and provides the functionality to develop and deploy Web applications on the server.
IIS handles the request and response cycle on the Web server.
IIS also offers the services of SMTP and FrontPage server extensions.
The SMTP is used to send emails and use FrontPage server extensions to get the dynamic features of IIS, such as form handler.

. What are the different types of caching?

ASP.NET has 3 kinds of caching :

Output Caching,
Fragment Caching,
Data Caching.

6. What is a multilingual website?

If a website provides content in many languages, it is known as a multilingual website. It contains multiple copies of its content and other resources, such as date and time, in different languages.

7. What is caching? Explain.

Caching is the technique which facilitates you to store frequently used items in memory so that they can be accessed more quickly. Or Caching is a technique used to increase performance by keeping frequently accessed data or files in memory. The request for a cached file/data will be accessed from cache instead of actual location of that file.

8. what are the main requirements for caching?

By caching the response, your request is served by the response already stored in memory.
You must be very careful while choosing the items to cache because Caching incurs overhead.
A frequently used web form which data doesn't frequently change is good for caching.
A cached web form freezes form?s server-side content, and changes to that content do not appear until the cache is refreshed.

9. What are the advantages of ASP.NET?

ASP.Net is the next generation of ASP technology platform. It is superior to ASP in the following ways:

Highly Scalable
Compiled Code
User Authentication
Language Support
Third party control
Configuration and Deployment are easy.
Object and Page caching
Strict coding requirements

10. What is the concept of Postback in ASP.NET?

Postback is a request which is sent from a client to the server from the same page user is working with. There is an HTTP POST request mechanism in ASP.NET. It posts a complete page back to the server to refresh the whole page.

11. What is the used of "isPostBack" property?

The "IsPostBack" property of page object is used to check that the page is posted back or not.

12. How do you identify that the page is PostBack?

There is a property named "IsPostBack" property in Post object, which can be checked to know that the page is posted back.

13. What is the parent class of all web server control?

System.Web.UI.Control class

14. What is the difference between ASP.NET Webforms and ASP.NET MVC?

ASP.NET Webforms uses the page controller approach for rendering layout. In this approach, every page has its controller.

On the other hand, ASP.NET MVC uses the Front Controller approach. In this approach, there is a common controller for all pages.

15. What is the difference between session object and application object?

The session object is used to maintain the session of each user. A session id is generated if a user enters in the application and when the user leaves the application, the session id is automatically deleted.

On the other hand, the application object is used to store the information and access variables from any page in the application.

16. What is the difference between trace and debug?

Debug class is used to debug builds. Trace class is used for both debug and release builds.

17. What is the difference between client-side and server-side validations in WebPages?

The client-side validation happens at the client's side with the help of JavaScript and VBScript. This validation has occurred before the Web page is sent to the server.

The server-side validation happens at the server side.

18. What is the difference between file-based dependency and key-based dependency?

File-based dependency: File-based dependency facilitates you to save the dependency on a file in a disk.

Key-based dependency: In key-based dependency, you depend on another cached item.

19. What is the difference between globalization and localization?

Globalization: Globalization is a technique to identify the part of a Web application that is different for different languages and separate it out from the web application.

Localization: In localization, you try to configure a Web application so that it can be supported for a specific language or locale.

20. What is the difference between a page theme and a global theme?

Page Theme: The page theme is applied to particular web pages of the project. It is stored inside a subfolder of the App_Themes folder.

Global Theme: The Global theme is applied to all the web applications on the web server. It is stored inside the Themes folder on a Web server.

21. What is the difference between early binding and late binding?

Early Binding: In early binding, a non-virtual method is called which is decided at a compile time.

Late Binding: In late binding, a virtual method is called which is decided at runtime.

22. What is the difference between server-side scripting and client-side scripting?

Server-side scripting: In server-side scripting, all the script are executed by the server and interpreted as needed.

Client-side scripting: In client-side scripting, the script will be executed immediately in the browser such as form field validation, email validation, etc.

The client-side scripting is usually carried out in VBScript or JavaScript.

23. How to sign out from forms authentication?

FormsAuthentication.Signout() method is used to sign out from forms authentication.

24. How to display validation messages in one control?

By the help of ValidationSummary control, we can display all validation messages in one control.

25. What is the difference between authentication and authorization?

Authentication is a process of identifying user whereas authorization is used to check the access rights of an identified user.

26. Which object encapsulates state or data of a user?

Session object.

27. What is ViewState?

ViewState is a feature of ASP.NET to store the values of a page before it is submitted to the server. After posting the page, data from is ViewState is restored.

28. What is ViewState information stored?

It is stored in HTML hidden field.

29. What are the differences between the Response.Write() and Response.Output.Write()?

Response.Write() is used for normal output whereas Response.Output.Write() is used for formatted output.

30. Define the types of configuration files.

There are two types of configuration files:

Application Level config = Web.config.

Machine Level config = Machine.config.

31. What is the difference between Web config and Machine config files?

Web config file is specific to web application whereas Machine config file is specific to machine or server.

There can be multiple web config files in an application but only one machine config file.

32. What is MVC?

MVC stands for Model View Controller. It is a design pattern that is used to separate business logic and presentation logic. It is used to develop the highly customized application.

The Model represents data, View represents presentation and controller acts as an interface between Model and View.

33. What are the built-in objects in ASP.NET?

The major built-in objects are given below:

Application
Session
Context
Request
Response
Server
Trace

34. What do you mean by Role-based security?

Role-based security is used in almost all organization, and the Role-based security assigns certain privileges to each role.

Each user is assigned a particular role from the list.
Privileges as per role restrict the user's actions on the system and ensure that a user can do only what he is permitted to do on the system.

35. What is a cookie?

A Cookie is a small piece of information which is stored at the client side. There are two types of cookie:

Session/Temporary Cookie: valid for a single session
Persistent Cookie: valid for multiple session

36. What is the default timeout for a cookie?

30 minutes.

37. How would you turn off cookies on a page of a website?

You have to follow the procedures given below:

Use the "Cookie.Discard" property.
It gets or sets the discard flag set by the server.
When set to true, this property instructs the client application not to save the Cookie on the hard disk of the user at the end of the session.

38. Which protocol is used to call web service?

HTTP protocol.

39. What is the file extension of web service?

The File extension of web service is .asmx.

40. What are the HTML server controls in ASP.NET?

HTML server controls are just like HTML elements that we use on the HTML pages.

HTML server controls are used to expose properties and events for use.
To make these controls programmatically accessible, we specify that the HTML controls act as a server control by adding the runat="server" attribute.

41. What is the use of Global.asax file?

The Global.asax file is used to execute the application-level events and sets application-level variables.

42. What is event bubbling?

When child control sends events to parent, it is termed as event bubbling. Server controls like Data Grid, Data List, and Repeater can have other child controls inside them.

43. When does a session actually start?

A session actually starts when a visitor requests your site for the first time. A new session starts when the request doesn't contain any SessionID or the sessionID references an expired session. The Session_OnStart event in Global.asax can be used for tracking session-related information.

44. What are the various session modes in ASP.NET?

In-proc:

Session data is stored in the same machine as that of the server. So session data is lost, when the server restarts. Session data is overhead on the server.

State server:

Session data is stored in a separate machine.

SQL Server:

Session data is stored in a SQL Server database and kept centrally.

45. Session.Abandon() vs Clear()

Session.Abandon() destroys the current session by firing a Session_End event. It releases the SessionState object and its items to free the resources.

Session.Clear( ) just clears the session data (gives a null value to the session) without killing it. It still holds the SessionState and resources associated with it.

Session ID will remain the same in both of the cases as long as the browser is not closed.

46. What are the various ways to send content from one page to another?

Response. Redirect()
Server.Transfer()
WebClient.DownloadFile()

47. In which event of page cycle is the ViewState available?

After the Init() and before the Page_Load().

48. What is the difference between Server.Transfer and Response.Redirect?

In Server.Transfer page processing transfers from one page to the other page without making a round-trip back to the client's browser. This provides a faster response with a little less overhead on the server. The clients url history list or current url Server does not update in case of Server.Transfer.

Response.Redirect is used to redirect the user's browser to another page or site. It performs trip back to the client where the client's browser is redirected to the new page. The user's browser history list is updated to reflect the new address.

49. From which base class all Web Forms are inherited?

Page class.

50. What are the different validators in ASP.NET?

Required field Validator
Range Validator
Compare Validator
Custom Validator
Regular expression Validator
Summary Validator

51. Which validator control you use if you need to make sure the values in two different controls matched?

Compare Validator control.

52. Where the viewstate is stored after the page postback?

ViewState is stored in a hidden field on the page at client side. ViewState is transported to the client and back to the server, and is not stored on the server or any other external source.

53. How long the items in ViewState exists?

They exist for the life of the current page.

54. What are the different Session state management options available in ASP.NET?

In-Process
Out-of-Process.
In-Process stores the session in memory on the web server.

Out-of-Process Session state management stores data in an external server. The external server may be either a SQL Server or a State Server. All objects stored in session are required to be serializable for Out-of-Process state management.

55. How you can add an event handler?

Using the Attributes property of server side control.

e.g.

btnSubmit.Attributes.Add("onMouseOver","JavascriptCode();")

56. List the events in page life cycle.

Page_PreInit
2) Page_Init
3) Page_InitComplete
4) Page_PreLoad
5) Page_Load
6) Page_LoadComplete
7) Page_PreRender
8) Render

57. Can we have a web application running without web.Config file?

Yes

58. Is it possible to create web application with both webforms and mvc?

Yes. We have to include below mvc assembly references in the web forms application to create hybrid application. System.Web.Mvc

System.Web.Razor

System.ComponentModel.DataAnnotations

59. Can we add code files of different languages in App_Code folder?

No. The code files must be in same language to be kept in App_code folder.

60. What is Protected Configuration?

It is a feature used to secure connection string information.

61. What are the event handlers that we can have in Global.asax file?

Application Events: Application_Start , Application_End, Application_AcquireRequestState, Application_AuthenticateRequest, Application_AuthorizeRequest, Application_BeginRequest, Application_Disposed, Application_EndRequest, Application_Error, Application_PostRequestHandlerExecute, Application_PreRequestHandlerExecute,Application_PreSendRequestContent, Application_PreSendRequestHeaders, Application_ReleaseRequestState, Application_ResolveRequestCache, Application_UpdateRequestCache

Session Events: Session_Start,Session_End

62. What is the difference between web config and machine config?

Web config file is specific to a web application where as machine config is specific to a machine or server. There can be multiple web config files into an application where as we can have only one machine config file on a server.

63. Explain role based security ?

Role Based Security used to implement security based on roles assigned to user groups in the organization.

Then we can allow or deny users based on their role in the organization. Windows defines several built-in groups, including Administrators, Users, and Guests.

```
<AUTHORIZATION>< authorization >
< allow roles="Domain_Name\Administrators" / >  < !-- Allow Administrators in domain. -- >
< deny users="*"  / >                    < !-- Deny anyone else. -- >
< /authorization >
```

64. What is Cross Page Posting?

When we click submit button on a web page, the page post the data to the same page. The technique in which we post the data to different pages is called Cross Page posting. This can be achieved by setting POSTBACKURL property of the button that causes the postback. Findcontrol method of PreviousPage can be used to get the posted values on the page to which the page has been posted.

65. How can we apply Themes to an asp.net application?

We can specify the theme in web.config file. Below is the code example to apply theme:

```
<configuration>

<system.web>

<pages theme="Windows7" />

</system.web>

</configuration>
```

66. What is RedirectPermanent in ASP.Net?

RedirectPermanent Performs a permanent redirection from the requested URL to the specified URL. Once the redirection is done, it also returns 301 Moved Permanently responses.

67. Explain the working of passport authentication.

First of all it checks passport authentication cookie. If the cookie is not available then the application redirects the user to Passport Sign on page. Passport service authenticates the user details on sign on page and if valid then stores the authenticated cookie on client machine and then redirect the user to requested page

68. What are the asp.net Security Controls?

<asp:Login>: Provides a standard login capability that allows the users to enter their credentials
<asp:LoginName>: Allows you to display the name of the logged-in user
<asp:LoginStatus>: Displays whether the user is authenticated or not
<asp:LoginView>: Provides various login views depending on the selected template
<asp:PasswordRecovery>: email the users their lost password

69. In which event are the controls fully loaded?

Page load event.

70. How we can force all the validation controls to run?

The Page.Validate() method is used to force all the validation controls to run and to perform validation.

71. List all templates of the Repeater control.

ItemTemplate
AlternatingItemTemplate
SeparatorTemplate
HeaderTemplate
FooterTemplate

72. What is the appSettings Section in the web.config file?

The appSettings block in web config file sets the user-defined values for the whole application.

For example, in the following code snippet, the specified ConnectionString section is used throughout the project for database connection:

<configuration>
<appSettings>
<add key="ConnectionString" value="server=local; pwd=password; database=default" />
</appSettings>

73. What are the different types of cookies in ASP.NET?

Session Cookie - Resides on the client machine for a single session until the user does not log out.

Persistent Cookie - Resides on a user's machine for a period specified for its expiry, such as 10 days, one month, and never.

74. What is the difference between ExecuteScalar and ExecuteNonQuery?

ExecuteScalar returns output value where as ExecuteNonQuery does not return any value but the number of rows affected by the query. ExecuteScalar used for fetching a single value and ExecuteNonQuery used to execute Insert and Update statements.