Question :- 5 [A]

* Give the answer in one word or one line.

1. what is the use of writeXML() method ?
   - writeXML() used to read data from dataset and write data as xml data.

2) Full form of UDDI.
   - Universal Description Discovery Integration.

3.) what is error Handling ?
   - Error Handling is a very useful part in the application. when you are developing a Application you can handle all the compile time errors because that type of errors are static so you can handle at the time of development.

4.) SOAP stand for..
   - SOAP stand for Simple Object Access Protocol

5.) Full form of xml
   - eXtensible Markup Language

6.) what is xml Parser ?
   - xml parsing is the process of reading an xml document and providing an interface to the

user application four accessing the document.

Question :- 5 [B]

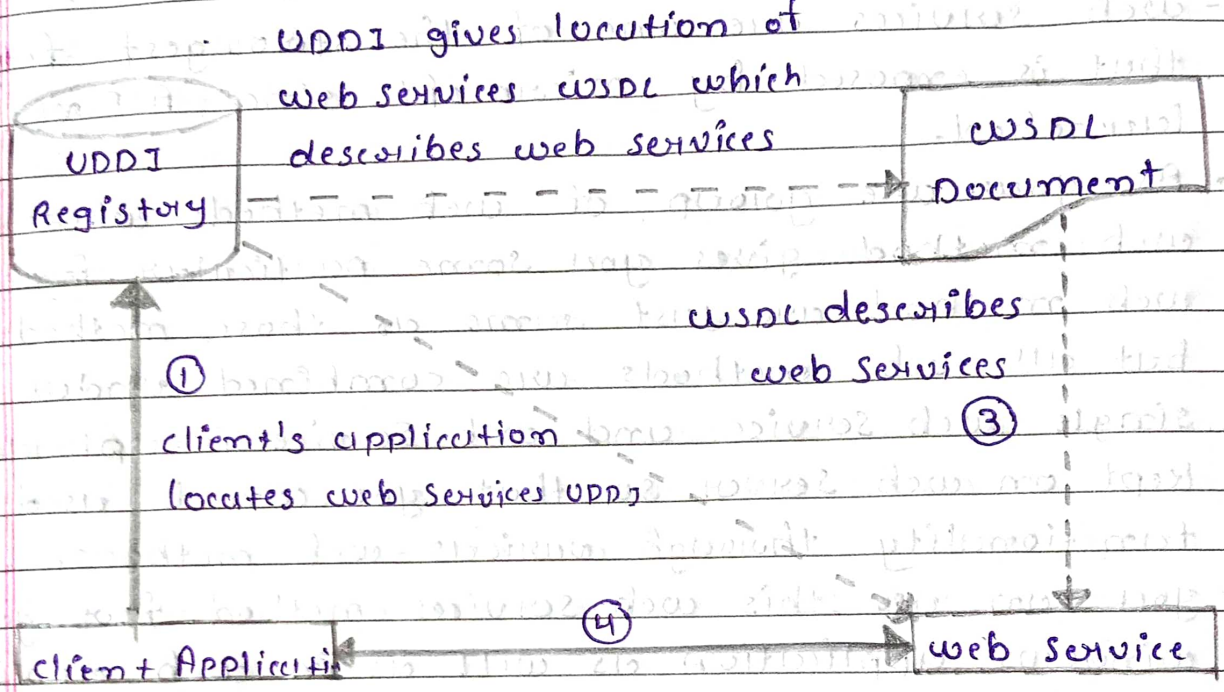
↓ Attempt any two question.

1.) Explain UDDI.

- UDDI is a directory service where different companies can register and search for their web services.
- You can say that UDDI provides standard mechanism to register and discover a web service.
- If we talk in easy words, UDDI is a place for storing information about web services.
- These directories manage WSDL documents and provides a means for clients to find and use web services.
- The client who wants to access some web service, need to first of all find the particular web services and then need to use it.
- The place where you can find all the registered web services, is UDDI.
- When you register web services under UDDI, its registered and the URL of web service is stored under UDDI, which can be accessed by client after searching it. UDDI communicates via SOAP.
- The fact is that it was never widely adopted and practically no one uses it. Instead, most web service implementations use other forms of documentation to publish their

web services.

- For example, Amazon.com has web services that anyone can use; you just visit its site and read its documentation, which includes all the information you need for finding and using its web services.



2.) Difference Between XML & HTML.

- HTML is a markup language. view / presentation is its main goal.
- So HTML always focuses on how your data will look.
- XML is also a markup language. Data is the main goal of XML.

- It is designed to store and transfer your data from one location to another via xml mainly focuse on data part. You can specify your own rules to enter data as per your requirement in xml.

3.) Explain web services :-

- web services are one of the strongest feature that is exposed by microsoft since ASP.NET launched.
- As your are group of web methods where each web method gives you some particular functionality web method are just same as those methods, but all web methods are combined under a single web service and web service is uploaded / kept on web server so that you can be used its functionality through various web methods.
- you can use this web services method for your windows application as well as in web applicat
- web services can be used by different applicat regardless on the progeramming language, Operating System and Hardware platform.
- A web service is a distributed computing technology that enables the exposure and reuse of logical business entities over the Internet.
- web services provide a platform-independent meomeans of exposing business logic over the Internet.

- Creating Asp.NET web service is easy and abstracts much of the complexity associated with Internet communications. This allows developers to concentrate on business logic.
- web services has no. of web methods that provide different functionality which can be accessed by different types of application.
- An application which uses web services is called as web service client as it is used particular web service.
- Today there are so many clients, each of them don't use similar configuration. Some client use different hardwer, some use different operating system and programming languages.
- Now question is how to share something amon all of them. web services are the components which are shareable among all types of hardwar Os and programming language.
- The reason behind these are web services are
- Platform independent.
- web services can be shared among any platform. Now the question arises is how it is possible.
- The answer is various standard and protocols work behind web services.
- Standard / Protocol for Web Services
  - XML (eXtensible Markup Languages)
  - SOAP (Simple object Access Protocol)
  - WSDL (web Services Description language)
  - UDDI (universal Description Discovery Integrati n)

4.> Explain WSDL

- As we have already discussed the web services are platform independent. so, explanation of web method i.e. Its parameters, return value and doy, everything should also be in standard format so that it can be shard among all platform.
- This is achived by using xml based description language called WSDL. WSDL is a language which is used to describe web service and its web method.
- The web services Description language is an xml-based format format foor describing a web service.
- It describes what the web service is, its parameters, and how to use it.
- WSDL contains following information about particular web serviece and its web methods:
  - At which website the all web services are located.
  - web services used for what
  - Format of web services method
  - Form where this web method is access.

Question :- 5 [C]

↓ Attempt any one question.

1.) write notes on custom error handing in ASP.NET.

- This is also used to handle the error at application level. when you are not clear about the error that error occurred in which page or sometimes the possibilities is there error occurred in more than one pages at that time you can use the <customError> tag of the web.config file.

Example :-

```
<configuration>
  <system.web>
    <customErrors mode="On" defaultRedirect =
                  "GeneralError.aspx">
    <error statusCode="401" redirect="UnAtho-
    -rizedError.aspx" />
    <error statusCode="404" redirect "PageNot-
    --FoundError.aspx" />
    <error statusCode="408" redirect="TimeOut-
    -Error.aspx" />
    </customErrors>
  <system.web>
</configuration>
```

Status Code	Error Message
401	Unauthorized Access
403	Forbidden (Request is rejected)
404	Page not found
408	Request timeout
500	Internal server error
503	Service unavailable (server down)

- This mode attribute specifies whether to show user-defined custom error pages or ASP.NET error pages. Three values are supported for this attributes.
  - On :- custom error pages are always shown, unless one is not specified.
  - off :- Custom error page are not shown. Instead, Asp.NET error page will be displayed always, which will have rich error information.
  - RemoteOnly :- Custom error pages are shown for all remote users.

2.> what is tracing? Explain types of tracing.
- To trace means to monitor.
- Tracing is a process of finding the problem from the application. when you executes the web site or particular page within the web site, you cannot detect the value of variable, property or methods or any code.

- sometimes, you can't find the actual problem at that time by the using of trace. Functionality you can know the flow of the program and find the bug or error by the help of the value of source code without effect the actual output.
- Tracing is important to test your website in order to give perfect output as per developer's requirement which fulfills user's need.
- Tracing can be done at two levels. They are
  - Page level Tracing
  - Application Level Tracing

Page level Tracing :-

- Page level tracing is useful when you want to trace only selected web pageges from your website.
- Page level tracing allows you to trace a particular selected page.
- Explains how to enable tracing for a page, as well as how to include trace statements in page output and how to interpret trace message for a page.
- The page level tracing can be enable using page directive called Trace.
- Also, we have inbuilt Trace object to enable and disable the tracing dynamically. In the page, on load event if you write the bto below line, The tracing will be enable.

Trace :-

: This is the attribute of the page directive. It has a boolean value. Default value is false. If you want
:- to trace a particular page you can set the value true of Trace attribute.

Trace mode :-

- you can also use the TraceMode attribute of the <%@Page... %> directive to specify how you want.

Application Level Tracing :-

- you can enable tracing for an entire application in that application's configuration system the web.config file in the application's root directory.
- when you are working with page level Tracing, you need to know probable page that is to be traced.
- If your application is complex and if you want to trace you might not be aware exact page that is to be traced.
- As we know that web.config is a file that manages the application level settings. In the same file we can mention setting of the Trace.

```
<configuration>
  <system.web>
```

```
<trace enabled="true" PageOutput="true"
    requestLimit="10" traceMode="SortByTime"
    localOnly="true" />
</system.web>
</configuration>
```

3.) Explain Authentication and Authorization.

- Authentication and Authorization are two interrelated security concepts. In shorted, authentication is a process of identifying a user, while authorization is the process of determining if an authenticated user has access to the resource(s) they requested.
- Typically, authentication is achieved by the user showing credentials that somehow verify the user's identity.
- Authentication means to check who are you?
- Authorization means what rights give to the user?

• Types of Authentication
  - None (No Authentication)
  - Form authentication
  - Windows authentication
  - Passport authentication.

- None (No Authentication)

- This option is used when you do not want to use any authentication for the web site. This mode has not any type of the security in the web site.

Example :-

```
<configuration>
  <system.web>
    <authentication mode="None">
  </system.web>
</configuration>
```

- Forms Authentication :-

- This authentication mode is based on cookies where the user name and the password are stored either in a text file or the database

- Windows Authentication :-

- This is the default authentication mode in Asp.NET. using this mode, a user is authenticated based on his/her windows account. window Authentication can be used only in an internet environment where the administrator has full control over the users in the network. The following should be set in the web.config file to use windows Authentication.

Example :-

```
<authentication mode="window" />
  <authorization>
    <allow users="*" />
  </authorization>
```

Passport Authentication :-

- Passport authentication is concerend with microsoft services authentication. This method uses centralization authentication service provided directly by microsoft passport services developed by microsoft.

Example :-

```
<configuration>
    <system.web>
    <authentication mode="Passport">
        <passportredirectUrl="login.aspx" />
    </authentication>
    <authentication>
        <deny users="?" />
    </authentication>
</system.web>
```

4.) Explain ASP.NET configuration File.

- Each and Every ASP.NET application has its own copy of configuration setting stored in a file called web.config. This file is generated from machine.config file. web config file is store in
- c:\<windows>\Microsoft.NET\Framework\<version config\
- If the web application spans multiple floder, each sub folder has its own web.config file that inherits or overrides the parent's file setting.

- Configuration File Format

- Both machine.config and web.config share the same XML scheme. Configuration files are divided into multiple sections, with each section being a top-level XML element. The root level element in a configuration file is always <configuration>. Configuration file is organized as hierarchy of section handler, with each section provide a unique functionality.

```
<?xml version="1.0"?>
<configuration>
    <!-- All other Configuration Sections
        are place here configuration
        section -->
</configuration>
```

- <configuration> Sections :-

<configSection> :
This allows you to configure different section of web application like JavaScript, web Services, Resources etc.

<appSetting> :
configures custom setting for an application
- The setting in this section can be compared to application variables

<connectionstring>:
Specifies a collection of database connection strings, as name/value pairs, for ASP.NET application and features.

<System.web>:
This is important element used to configure your web application.
<compilation>
<caching>
<deployment>
<trace>
<webServices>
<authentication>
<customErrors>
<roleManager>
<sessionState>

- https://www.youtube.com/watch?v=13Sqd1r88gM4&t=
- system.codedom>:
- This section store compiler specific informa used for your web application under <compilers> element.

<system.webServer>:
- This section store information and configur setting for web servers which will be used for your deploying and running your web appli

<runtime>:
- This section is used to specify some runtim setting for your web application. Run Time setting can include no. of setting like connection string, data provider etc.