IT8501 – WEB TECHNOLOGY
Question Bank
UNIT – I

1. DEFINE INTERNET.
Network is an interconnection of systems to share data and information.
Internet is network of network or collection of heterogeneous networks.

2. WHAT IS THE USE OF IP ADDRESSES AND PORTS?
It is very difficult to remember the IP address of each and every node. It
order to avoid this problem domain names are used.
Example googl.com, rediff.com etc.
PORTS
Ports are used in receiving and sending data to another server or client.
Example for port numbers
Protocol Port Protocol Purpose
Echo 7 TCP/UDP Echo is a test protocol used to verify that 2 machines
1. are able to connect by having one echo back the Application Layer Transport Layer (TCP,
UDP) Internet layer (IP) Physical path(Ethernet, FDDI etc) other's input.
Discard 9 TCP/UDP Discard is a less useful test protocol in which all data
2. received by the server is ignored.
FTP 21
SMTP 25
HTTP 80
POP3 110
NTP 119 Usenet News transfer is more formally known as the
Network News Transfer Protocol
RMI Registry 1099 This is the registry service for Java Remote Objects.

3. MENTION THE DIFFERENT INTERNET ADDRESS CLASS AND IT'S RANGE.
Internet addresses are assigned to different organizations by the Internet Assigned
Numbers Authority (IANA).

ISP – Internet Service Providers gives a block addresses.

Class C address block specifies the first 3 bytes of address, for example 199.1.32. This
allows room for 254 individual addresses from 199.1.32.1 to 199.1.32.254
Class B address specified only the first 2 bytes of the addresses .
There are also Class D and E addresses are used for IP multicast group.

4. DEFINE FIREWALL.
The hardware and software that sits between the Internet and the local network, checking all the
data that comes and goes out is called "firewalls". The security is provided using SSL(Secure
Socket Layer) in internet.

5. DEFINE PROXY SERVERS

Proxy servers are related to firewalls prevents hosts on a network from making direct connections to the outside world, a proxy server can act as a go-between. Thus a machine that is prevented from connecting to the external network by a firewall would make a request for a web page from the local proxy server instead of requesting the web page directly from the remote web server.

6. WHAT IS THE USE OF HTTP PROTOCOL?

HTTP is a standard protocol that defines how a web client talks to a server and how data is transferred from the server back to the client.
HTTP relies heavily on two other standards.
MIME (Multipurpose Internet Mail Extensions), HTML

7. WHAT IS THE USE OF MIME?(Multipurpose Internet Mail Extension)

MIME is a way to encode different kinds of data, such as sound and text, to be transmitted over a 7-bit ASCII connection. It also lets the recipient know what kind of data has been sent, so that it can be displayed properly. MIME was originally designed to facilitate multimedia email and to provide an encoding that could get binary data past the most train
–damaged mail transfer programs.

8. DEFINE URL & URN.

URL-Uniform Recourse Locator is a way to unambiguously identify the location of a resource on the Interned.

URI Uniform Resource Identifier is a string of characters in a particular syntax that identifies a resource.

The resource identified may be a file on a server, but it may also be an email address, a news message, b book, a person's name, an Internet host.
Syntax
Scheme: scheme-specific-part
Scheme types
data – base 64 encoded data included directly in a link
file – A file on a local disk
FTP – An FTP server
gopher – a Gopher server
mailto – an email address
news – A Usenet newsgroup
Telnet – A connection to a Telnet based service (only used in Remote Login System)
urn – Uniform Resource Name

9. EXPLAIN ABOUT URN

There are 2 types of URLs.
URL – Unform Resource Locaters (is a pointer to a particular resource on the Internet at a particular location.)
URNs – Uniform Resource Name (is a name for a particular resource but without reference to a particular location)
SYNTAX OF URN
urn:namespace:resource-name
namespace - is the name of a collection of certain kinds of resources maintained by some

authority.

resource-name – is the name of a resource within that collection.

10. WHAT IS MEANT BY RELATIVE URL?

URLs that are not complete but inherit pieces from their parent are called relative URL. In contrast, a completely specified URL is called an absolute URL address.

11. EXPLAIN ABOUT SGML – STANDARD GENERALIZED MARKUP LANGUAGE

• HTML is an instance of SGML.

• SGML was invented beginning in the mid-1970s by Charles Goldfarb at IBM

• SGML is now an International Standards Organization (ISO) standard, specifically ISO 8879:1986.

• SGML allows the user to create various user defined tags easily without any rules.

EXAMPLE 1 – FOR PRODUCT DETAILS

<PRODUCT MANUFACTURER="ABC COMPANY"> -Assumed as record name

<NAME> KEY BOARD </NAME>

<TYPE> KEY BOARD </TYPE>

<PRICE> 1500 </PRICE>

</PRODUCT

12. EXPLAIN ABOUT XML – EXTENSIBLE MARKUP LANGUAGE

• Similar to SGML

• Allows the user to create any number of user defined tags.

• The value of an attribute may be enclosed in double of single quotes like this:

• <H1 ALIGN=CENTER> THIS IS CENTERED H1 HEADING </H1>

• STYLES can be introduced for XML program like CSS using XLS file(XML Style Sheet program)

• Here XML styles are saved with an extension of .xls (XML style sheet)

• Using .xls files various styles can be given to the data which is inside the XML program.

13. LIST THE STEPS FUNCTIONS OF HTTP PROTOCOL.

Standard protocol for communication between web browsers and web servers.

HTTP specifies how a client and server establish a connection, how the client requests data from the server, how the server responds to that request, and finally how the connection is closed.

HTTP 1.0 is the currently accepted version of the protocol. It uses MIME to encode data.

The basic protocol defines a sequence of 4 steps for each request from a client to the server.

Making the connection

Making a request

Receiving the response

Closing the connection

14. WHAT IS DOMAIN & MENTION DIFFERENT TYPES OF DOMAINS?

Domain is a place where information is available.

DOMAIN NAME EXTENSION

.edu – Servers that provide Educational services

.gov – About the government of a country.

.mil – Servers that provide military information.

.org – Provide information about the organizations in the world.

.com – Servers providing commercial services on the Internet.

15. WRITE THE FORMAT OF HTML PROGRAM

```
<HTML>
<HEAD>
<TITLE> This is the Title </TITLE>
</HEAD>
<BODY>
…. Type the body of the program
</BODY>
</HTML>
```

Note: All the tags in HTML program are optional, however the file should be saved in .html extension.

16. MENTION SOME TEXT FORMATTING TAGS

<p> </p> - is used for introducing various paragraphs.

 - this tag is used for giving an empty blank line.

HEADING TAGS - <h1> </h1> .. <h6> </h6> is used to introduce various headings.

<h1> is the biggest and h6 is the smallest heading tag.

<HR> TAG – is used to draw lines and horizontal rules.

<B>,<I>,<U> for bold, italic and underline respectively.

17. EXPLAIN ABOUT LIST TAG.

TYPES OF LISTS

Unordered lists

Ordered lists

UNORDERED

LISTS

It starts with <ul> and ends with

Attributes of Unordered lists

TYPE:

TYPE = FILLROUND or TYPE =

SQUARE EXAMPLE

```
<UL TYPE = FILLGROUND>
<LI> CSE </LI>
<LI> IT </LI>
</UL>
```

ORDERED LISTS (NUMBERING>

TYPE: Controls the numbering scheme to be used

TYPE = "1" will give counting numbers (1,2,…>

"A" will give A,B,C..

"a" will give a,b,c

"I" starts with Capital roman letters I,II,II…

"I" starts with small case roman letters

START: Alters the numbering sequence, can be set to any numeric value

VALUE: Change the numbering sequence in the middle of an ordered list

EXAMPLE

```
<OL TYPE = "1" START = 5>
<LI> CSE </LI>
```

<LI> IT </LI>
</OL>
OUTPU
T
5 CSE
6 IT

18. EXPLAIN THE ATTRIBUTES OF TABLE TAG WITH AN EXAMPLE

A table is a two dimensional matrix, consisting of rows and columns. All table related tags are included between <TABLE> </TABLE> tags.

<TABLE>
<TH> Heading </TH>
<TR> Row elements </TR>

<TD> Table data values </TD>
</TABLE>

ATTRIBUTES OF TABLE TAG

ALIGN Horizontal alignment is controlled by the ALIGN attribute. It can be set to LEFT, CENTER, or RIGHT VALIGN Controls the vertical alignment of cell contents. It accepts the values TOP, MIDDLE or BOTTOM WIDTH Sets the WIDTH of a specific number of pixels or

to a percentage of the available screen width.

BORDER Controls the border to be placed around the table.

CELLPADING This attribute controls the distance between the data in a cell and the boundaries of the cell

CELLSPACING Controls the spacing between adjacent cells

COLSPAN Used to spilt the single cell to one or more columns

ROWSPAN Used to spilt the single cell to one or more rows.

EXAMPLE

<TABLE BORDER = 3 WIDTH = 100 HEIGHT = 200>
<TR>
<TH> Roll Number </TH>
<TH> Age </TH>
<TR>
<TR> <TD> 1 </TD> <TD 35 </TD> </TR>
</TABLE>

ALIGN: ALIGN = TOP, MIDDLE,BOTTOM

BORDER: Specifies the size of the border to place around the image.

WIDTH: Specifies the width of the image in pixels.

HEIGHT: Specifies the height of the image in pixels

HSPACE: Indicates the amount of space to the left and right of the image

VSPACE: Indicates the amount of apace to the top and bottom of the image.

19. WHAT DO YOU MEAN BY COLUMN SPANNING AND ROW SPANNING?

Row spanning is used to merge (combine) two or more rows. Column spanning is used to merge (combine) two or more columns.

20. MENTION THE DIFFERENT TYPES OF LINKS

HTML allows linking to other HTML documents as well as images. There are 3 attributes that can be introduced in BODY tag.

LINK – Changes the default color of a Hyperlink to whatever color is specified with this tag.
ALINK – Changes the default color of a hyperlink that is activated to whatever color is specified with this tag.
VLINK – Changes the default color of a hyperlink that is already visited to whatever color is specified with this tag.
NOTE: User can specify the color name of a hyperlink or an equivalent hexadecimal number.
EXTERNAL
LINKS SYNTAX
<A HREF = "location name"> Hyper Text Message </A>

21. EXPLAIN IMAGE MAPS WITH ITS SYNTAX

When a hyperlink is created on an image, clicking on any part of the image will lead to opening of the document specified in the <A HREF TAG>. Linked regions of an image map are called hot regions and each hot region is associated with
a filename.html.
Syntax
<MAP NAME = "map name">
ATTRIBUTES OF IMAGE MAPS
COORDS: Each of the above shapes takes different coordinates as parameters.
Rectangle – 4 coordinates (x1,y2,x3,y2)
POLYGON: 3 or more coordinates.
HREF – Takes the name of the .html file that s linked to the particular area on the image.
<MAP NAME = "fish.jpg">
<AREA SHAPE = "rect" COORDS = "52,65,122,89" HREF = "sct.html">
</MAP>

22. EXPLAIN ABOUT HTML FORM TAG WITH ITS ATTRIBUTES.

HTML form provides several mechanisms to collect information from people viewing your site. The syntax of the form is
<FORM METHOD = "POST" ACTION = "/cgi-bin/formail">
• The METHOD attribute indicates the way the web server will organize and send you the form output.

• Use METHOD = "post" in a form that causes changes to server data, for example when updating a database.
• The ACTION attribute in the FORM tag is the path to this script; in this case, it is a common script which emails form data to an address. Most Internet Service Providers will have a script like this on their site.

23. MENTION THE VARIOUS FORM ELEMENTS.

Various elements or controls can be created in FORM using <INPUT> tag. They are 1. Label 2. Text box 3. Text Area 4. Radio button 5. Check box 6. List box 7. Command button 8. Scroll bars

24. WHAT IS THE USE OF FRAMES IN HTML GIVE THE SYNTAX OF FRAMES

Frames are used to call many html files at the same time. This can be done using
<FRAMESET> </FRAMESET>
tags. ATTRIBUTES OF FRAMES

ROWS – This attribute is used to divide the screen into multiple rows. It can be set equal to a list of values. Depending on the required size of each row. The values can

• A number of pixels

• Expressed as a percentage of the screen resolution

• The symbol *, which indicates the remaining space.

COLS – This attribute is used to divide the screen into multiple columns.

EXAMPLE

<FRAMESET ROWS = "30%,*"> => Divides the screen into 2 rows,

• occupying the remaining space

<FRAMESET COLS = "50%,50%"> => Divides the first row into 2 equal

columns

<FRAME SRC = "file1.html">

<FRAME SRC = "file2.html">

<FRAMESET COLS = "50%,50%"> => Divides the second

row into 2 equal columns

<FRAME SRC = file3.html">

<FRAME SRC = file4.html">

</FRAMESET>

</FRAMESET>

25. What is the difference between node and host?

A node is any addressable device connected to a network whereas the host is a more specific descriptor that refers to a networked general-purpose computer rather than a single purpose device (such as a printer).

26. Define protocol.

A protocol is a formal set of rules that must be followed in order to communicate.

27. Define port.

A port is a logical channel to an application running on a host. ie., The applications running on the host machines are uniquely identified by port numbers.

28. What do you mean by well-known ports?

Port numbers can range from 1 to 65535, however ports 1 to 1023 are reserved. These reserved ports are referred to as we1l-known ports because the Internet Assigned Numbers Authority publicly documents the applications that use them.

29. What is meant by Name Resolution?

Name Resolution is the process of mapping a hostname to its corresponding IP Address. One way to translate a hostname to an IP address is to look it up in a simple text file. The second way is the domain name service, which is a distributed database containing all registered hostnames on the Internet and their IP addresses.

30. Define URI, URL, URN.

• URI (Uniform Resource Identifier): It identifies an object on the Internet.

• URL (Uniform Resource Locator): It is a specification for identifying an object such as a file, newsgroup, CGI program or e-mail address by indicating the exact location on the internet.

• URN (Uniform Resource Name): It is a method for referencing an object without declaring the full path to the object.

31. What are the components of HTTP URL?

The components are host, an optional port, path, filename, section and query string.

32. Define URL encoding.

URL encoding involves replacing all unsafe and nonprintable characters with a percent sign (%) followed by two hexadecimal digits corresponding to the character\'s ASCII value.

33. What are the issues of next generation IP? The

issues to be considered in IP next generation are o

Addresses Space Growth

o Support large Global networks

o A clear way of transition from the existing IP to new IP next generation

34. List the goals of SGML.

• To manage the flow of millions of pages.

• For structuring information exchange

• For modeling inter-document linkages

• For managing information flows between departments and weapons systems

35. What is the role of server?

The server

• Manages application tasks

• Handles storage

• Handles security

• Provides scalability

• Handles accounting and distribution

36. What are the necessities of using HTML forms?

1. Gathering user information

2. Conducting Surveys

3. Interactive services

37. What are the sequences of steps for each HTTP request from a client to the server?

1. Making the connection

2. Making a request

3. The response

4. Closing the connection

38. List the predefined MIME content types.

1. Text

2. Multipart

3. Message

4. Image

5. Audio

6. Video

7. Model

8. Application

39. Define HTML.

It is a simple page description language, which enables document creation for the web.

40. What is meant by loop back address?

A zone that enables the server to direct traffic to itself. The host number is almost always

127.0.0.1.

41. Explain about HTTP Connection.

It is a communication channel between web browser and web server. It begins on the client side with the browser sending a request to the web server for a document.

Request Header Fields are

1. From
2. Reference
3. If_modified_since
4. Pragma
5. User Agent

42. What do mean by search engine?

It is a program or web page that enables you to search an Internet site for a specific keywords or words.

43. How do search engine work?

When you enter a keyword, the search engine examines its online database and presents to you a listing of sites that, in theory , match your search criteria.

44. Discuss about the client/server strategies in Internet.

• Application Server
• Database Server
• Transaction Server
• Six client/server models

45. Explain about <table> & <frame> tags in detail..

i. Syntax of <table> tag:
ii.
<TABLE>
iii.   <TR>…</TR>   <!—
Row1_   iv.   <TR>…</TR>
<!—Row2_ v. …
vi.   <TR>…</TR>   <!—
Rowm_
vii.
</TABLE>
viii. Syntax of <frame> tag:
ix. <frameset rows=" ", cols=" ">
x. <frame name=" " src=" ">
xi. <frame name=" " src=" ">
xii. …
xiii. <frame name=" " src=" ">
xiv. </frameset>

46. Explain about Internet servers.

• Mail servers
• Web servers
• FTP servers
• News server
• DNS servers

47. Explain the elements of WWW.

• Client & server

- Web languages & protocols
- Web pages
- Home page
- Web browsers
- Web sites

48. Explain HTML forms in detail along with form elements, attributes & methods.

<form method="how to send" ACTION="URL of script">

…form data…

</form>

Form fields & attributes:

i. <TEXTAREA> element

ii. <INPUT> tag: text, password, checkbox, radio, hidden, reset, submit, button

iii. <SELECT> tag

49. What are the ways by which a server and a browser do communicate?

GET & POST method

Web server to CGI communication

1. URL interpretation

2. CGI environment variables

CGI program to web server communication

- Parsed header
- Bypassing the server

50. What is HTML?

HyperText Markup Language. This is a file format, based on SGML, for hypertext documents on the Internet. It is very simple and allows for the embedding of images, sounds, video streams, form fields and simple text formatting. References to other objects are embedded using URLs. HTML is a plain text file with commands <markup tags> to tell the Web browsers how to display the file.

51. How do you change the color of background or text in HTML?

Include the element \"bgcolor\" with a color code in your body tag:

<BODY BGCOLOR=\"#ffffff\" TEXT=\"#000000\" LINK=\"#cc0000\"
VLINK=\"#000066\" ALINK=\"#ffff00\">

52. How do you use a picture as the background in HTML?

Include the element \"background\" with the name of the graphics file:

<BODY BACKGROUND=\"gumby.gif\" BGCOLOR=\"#ffffff\"
TEXT=\"#000000\" LINK=\"#cc0000\" VLINK=\"#000066\" ALINK=\"#ffff00\">

53. How do you add music to a web page?

<A HREF=\"http://www.snowhawk.com/sounds/hvnearth.mid\">Heaven on Earth</A>

54. How do you align text next to a graphic in HTML?

<IMG SRC=\"wflower.jpg\" WIDTH=\"25\" HEIGHT=\"25\" ALIGN=\"top\"
BORDER=\"0\" ALT=\"wildflower photo\"> Photo of wildflowers in Texas</A>

55. How do you make a graphic a link?

<AHREF=\"http://www.snowhawk.com/wildlife.html\"><IMG SRC=\"leopard.jpg\"
WIDTH=\"25\" HEIGHT=\"25\" ALIGN=\"top\" BORDER=\"0\" ALT=\"link to
wildlife\"></A>

56. How do you make a new paragraph in HTML?

Inserting the <P> tag at the beginning of your paragraph will drop the text down two lines. (If you insert the <BR> tag, it will drop your text down one line.)

57. How do you make headings and text larger or smaller?

There are 6 sizes to the heading tags:

This is using the <H1> tag

This is using the <H2> tag

This is using the <H3> tag

This is using the <H4> tag

This is using the <H5> tag

This is using the <H6> tag

58. How do you make text show as bold?

Placing the <B>tag before the text will make everything bold, until you close the tag with</B> (Or using <STRONG>tags</STRONG > will do the same.)

59. How do I make text show in italics?

Placing the <I>tag before the text will make everything in italics, until you close the tag with</I> (Using <EM>emphasis tags</EM > will do the same.)

60. How would you make all text on a page green and a little larger than normal, but

make all headings yellow?

Put the following at the beginning of the Web page:

<BODY   TEXT="green"><BASEFONT SIZE=4>

Then make each heading look like this:

<H1><FONT COLOR="Yellow">Heading goes here </FONT></H1>

61. Write the HTML to create the following ordered list.

X. Xylophone

Y.

Yak

Z. Zebra

<OL TYPE ="A" START = "24">

<LI> Xylophone

<LI>YA

K

<LI>Zebra

</OL>

The following alternative will also do the same things.

<OL   TYPE   ="A"<LI   VALUE ="24">Xylophone<LI>Yak<LI>Zebra</OL>

62. How would you insert a single word and put a square bullet in front of it?

<UL TYPE="Square"><LI>Supercalifragilisticexpealidocious</UL>

63. How would you insert an image file named elephant.jpg at the very top of a Web

page?

Copy the image file into the same directory folder as the HTML text file and type <IMG SRC> immediately after the <BODY> tag in the HTML text file

64. How would you give a Web page a black background and make all text, including

links, bright green?

Put the following at the beginning of the Web page:

<BODY BGCOLOR="black">

The following would do the same thing"

<BODY BGCOLOR ="#000000"

TEXT="#00FF00" LINK="00FF00" VLINK="#000000">

65. How would you make an image file named texture.jpg appear as a background tile?

<BODY BACKGROUND="texture.jpg"

TEXT="White" LINK="red" VLINK="blue" ALINK="black">

66. How would you wrap text around the right side of an image, leaving 40 pixels of space between the image and the text?

<IMG SRC="myimage.gif" HSPACE=40 VSPACE=40 ALIGN="left">Text goes here

67. How could you insert exactly 80 pixels of blank space between two paragraphs of

text?

Create a small image that is all one color, and save it as nothing.gif with that color set to be transparent. Then put the following tag between the two paragraphs of text:

<IMG SRC="nothing.gif" WIDTH=1 HEIGHT=80>

68. How would you write the HTML to draw a rule 20 pixels wide?

<HR WIDTH=20>

69. If you have a circular button that links to another page, how do you prevent a rectangle from appearing around it?

Use the BORDER=0 attribute, like this:

<A HREF="another_page.htm"><IMG SRC="circle.gif" BORDER=0></A>

70. What is meant by Stateless Connection?

When a web server receives a HTTP request from a web browser it evaluates the request and returns the requested document, if it exists, and then breaks the HTTP connection. This document is preceded by the response header, which has details about how to display the document that will be sent by the server. Each time a request is made to

the server, it is as if there was no prior connection and each request can yield only a single document. This is known as Stateless Connection.

UNIT - II

1. Mention the advantages of java/java script a.

Use sending data continuously File storage

Massively parallel computing□b.

Smart forms – includes various controls like text box, radio button, text□c. area control etc. d.
Peer-to-Peer Interaction – used in various client/server model.

e. Games – Combine the ability to easily include networking in your programs with java's powerful graphics and you have the recipe for truly awesome multiplayer games.

Chat – Used in various chat applications.□f.

Whiteboards – Java programs are not limited to sending ext and data□g. across the network.

h. A number of programmers have developed whiteboard software that allows users in diverse locations to draw on their computers

2. What are Style Sheets?

Style sheets are collections of style information that are applied to plain text. Style information includes font attributes such as type size, special effects (bold,italic,underline), color and alignment. Style sheets also provide broader formatting instructions by
specifying values for quantities such as line spacing and left and right margins.

3. List down the ways of including style information in a document.

a. 1.Linked Styles -Style information is read from a separate file that is specified in the <LINK> tag

b. 2.Embedded Styles -Style information is defined in the document head using the <STYLE> and </STYLE> tags.

c. 3.Inline Styles -Style information is placed inside an HTML tag and applies to all content between that tag and it companion closing tag.

4. Define cascading.

Cascading refers to a certain set of rules that browsers use, in cascading order, to determine how to use the style information. Such a set of rules is useful in the event of conflicting style information because the rules would give the browser a way to determine which style is given precedence.

5. What are the style precedence rules when using multiple approaches?

Inline styles override both linked style sheets and style information stored in the document head with <STYLE> tag.

Styles defined in the document head override linked style sheets.

Linked style sheets override browser defaults.

6. Give the syntax to specify a characteristic in linked style sheet.

{Characteristic: value}

Multiple characteristic/value pairs should be separated by semicolons.

7. List down font characteristics permitted in style sheets.

i. 1.font-family
ii. 2.font-size
iii. 3.font-weight
iv. 4.font-style
v. 5.font-variant

8. Write a note on content positioning characteristic \"Visibility\".

Enables the document author to selectively display or conceal positioned content; Possible values are show or hide.

9. Define scriptlets.

Scriptlets enable you to create small, reusable web applications that can be used in any web page. Scriptlets are created using HTML, scripting and Dynamic HTML. To include them in an HTML document use the <OBJECT> tag.

10. What does DHTML refer?

DHTML refers to collection of technologies, which makes HTML documents more dynamic and interactive.

11. What does data binding mean?

Data binding is DHTML feature that lets you easily bind individual elements in your document to data from another source such as database or comma delimited text file.

12. What is meant by Plug-in?

A hardware or software module that adds a specific feature or service to a larger system. The idea is that the new component simply plugs in to the existing system. For example, there are number of plug-ins for the Netscape Navigator browser that enable it todisplay different types of audio or video messages. Navigator plug-ins are based on MIME filetypes.

13. MENTION THE TYPES OF SCRIPTING LANGUAGES

• JavaScript is a Scripting language (web site development environment) created by Netscape.

• Hence JavaScript works best with the Netscape suite of Client and Server products.

• JavaScript is the native scripting language of Netscape Navigator.

• VBScript is the native Scripting language of HTML.

14. SERVER SIDE SCRIPTING

• In Server side scripting the script program is executed at Server Side the required html program is sent to the client.

• The job of the server is more in server side scripting

15. CLIENT SIDE SCRIPTING

• Here the script program is processed and executed in the client side itself.

• So that it reduces the burden of the server.

16. LIST THE ADVANTAGES OF JAVA SCRIPT

JavaScript is an object-oriented language that allows creation of interactive Web pages JavaScript allows user entries, which are loaded into an HTML form to be processed as required

17. ADVANTAGES

a. It is an interpreted language, which requires no compilation steps. b.

Embedded within HTML.

c. Minimal Syntax – easy to learn

d. Quick Development

e. Designed for simple, small programs f.

High performance

g. Procedural Capabilities – support facilities such as condition checking, looping and

h. branching.

i. Designed for programming user events – like VB Java Script is also based on Events. j.

Easy Debugging and Testing

k. Platform Independence/ Architecture Neutral l.
SYNTAX OF JAVASCRIPT PROGRAM
m. <HTML>
n. <HEAD>
o. <SCRIPT language = "JavaScript">
p. … body of the script program
q. </SCRIPT>
r. </HEAD>
s. <BODY>
t. <SCRIPT language = "JavaScript">
u. body of the program.
v. </SCRIPT>
w. </BODY>
x. </HTML>

18. WHAT IS DENSE ARRAYS?

• A dense array is an array that has been created with each of its elements being assigned a specific value.

• Dense arrays are used exactly in the same manner as other arrays.

• Dense arrays are declared and initialized at the same time

Array Methods

Join() – returns all elements of the array joined together as a single string.

Reverse() – reverses the order of the elements in the array.

19. LIST COMPARISION OPERATORS & STRING OPERATORS IN JAVA

• = = equal (perform type conversion before testing for equality.

• = = = strictly equal (do not perform type conversion before testing for equality

STRING OPERATORS

Currently Java Script supports only one string concatenation (+) operator.

EXAMPLE

"ab" + "cd" produces "abcd"

20. LIST THE VARIOUS DIALOG BOXES IN JAVA SCRIPT

Dialog boxes are used to display small windows. This is also used to get input from user. a.
SYNTAX
b. alert("message");
c. alert("Click here to continue")
d. prompt("Enter your name", name)
e. Alert is only used to display some information
f. Prompt is used to display information along with some input value
g. Confirm dialog box, causes program execution to halt until user action takes place. h.
The user action can be either OK or CANCEL.
i. OK – returns true
j. CANCEL – returns false

21. MENTION THE VARIOUS JAVA SCRIPT OBJECT MODELS .

• Math Object
• String Object
• Date Object

• Boolean and Number Object
• Document Object
• Window Object

22. HOW SCRIPTING LANGUAGE IS DIFFERS FROM HTML.
• HTML is used for simple web page design
• HTML with FORM is used for both form design and Reading input values from user.
• Scripting Language is used for Validating the given input values weather it is correct or not, if the input value is incorrect, the user can pass an error message to the user.
• Using form concept various controls like Text box, Radio Button, Command Button, Text Area control and List box can be created.

23. DEFINE FUNCTION IN JAVA SCRIPT .
Function is a part of a program or in other words function is a module in java program which can be called or invoked any number of times from the main program.
Function can be called any number of times but it can accept any input values or parameters, however it can return only one output at a time.

24. DEFINE CSS – CASCADING STYLE SHEET
• DHTML is a new and emerging technology that has evolved to meet the increasing demand for eye-catching and mind-catching web sites.
• DHTML combines HTML with Cascading Style Sheets (CSS) and Scripting Languages. HTML specifies a web page's elements like table, frame, paragraph, bulleted list, etc. CSS can be used to determine an element's size, color, position and a number of other features.
• Scripting Languages (JavaScript and VBScript) can be used to manipulate the web page's elements so that styles assigned to them can change in response to a user's input.

25. DEFINE CASDING STYLE SHEETS (CSS)
• CSS are powerful mechanism for adding styles (e.g. Fonts, Colors, Spacing) to web documents.
• They enforce standards and uniformity throughout a web site and provide numerous attributes to create dynamic effects.
• The advantage of a style sheet includes the ability to make global changes to all documents from a single location. Style sheets are said to cascade when they combine to specify the appearance of a page.
The style assignment process is accomplished with the <STYLE>…</STYLE> tags.

26. MENTION THE TYPES OF STYLE SHEETS
i. 1 Embedded or Internal Style sheet
ii. 2 External or Linked Style sheet
iii. 3 Inline style sheet

27. LIST THE DIFFERENCE BETWEEN STYLE SHEETS
Embedded Linked Inline Style Sheet Style program is embedded with in the HTML program itself.
Style program alone is stored in a separate file with an extension of .css file.
Different from Embedded and Linked CSS
Explicit LINK statement is not needed.
Explicit LINK REL statement is needed to connect with .CSS file
Not required

Styles can be used within the program only, it can not be called some other files.

Styles used in .CSS file can be used in any HTML program

Styles created should be used immediately before creatinganother new style.

28. LIST THE PROPERTIES OF STYLE TAG

<STYLE> tag properties are divided in to 6 categories. They are

• Font Attributes

• Color and Background attributes

• Text Attributes

• Border Attributes

• Margin Attributes and

• List Attributes.

29. HOW TO INTRODUCE STYLE IN HTML PROGRAM?

<HTML>

<HEAD>

<STYLE Type = "text/css">

predefined tag name {attribute name1:attribute value1; attribute name2:attribute value2; ……attribute name-n:attribute value-n}

<STYLE>

</HEAD>

<BODY>

write the body of program

</BODY> </HTML>

30. What are Style Sheets?

Style sheets are collections of style information that are applied to plain text. Style information includes font attributes such as type size, special effects (bold,italic,underline), color and alignment. Style sheets also provide broader formatting instructions by specifying values for quantities such as line spacing and left and right margins.

31. List down the ways of including style information in a document.

1.Linked Styles -Style information is read from a separate file that is specified in the <LINK> tag

2.Embedded Styles -Style information is defined in the document head using the <STYLE> and </STYLE> tags.

3.Inline Styles -Style information is placed inside an HTML tag and applies to all content between that tag and it companion closing tag.

32. What are the style precedence rules when using multiple approaches?

Inline styles override both linked style sheets and style information stored in the document head with <STYLE> tag.

33. Give the syntax to specify a characteristic in linked style sheet.

{Characteristic: value}Multiple characteristic/value pairs should be separated by semicolons.

34. List down font characteristics permitted in style sheets.
1.font-family
2.font-size
3.font-weight
4.font-style

35. Write a note on content positioning characteristic \"Visibility\".
Enables the document author to selectively display or conceal positioned content; Possible values are show or hide.

.

UNIT- 3

1. List any two keyboard events?
• onKeypress
• onKeyUp
• onKeyDown

2. List any two mouse events?
• onMouseUp
• onMouseDown
• onMouseOver
• onClick

3. What are Servlets?
A small program that runs on a server, the term usually refers to a Java applet that runs within a Web server environment. This is analogous to a Java applet that runs within a Web browser environment.
Java servlets are becoming increasingly popular as an alternative to CGI programs. The biggest difference between the two is that a Java applet is persistent. This means that once
it is
started, it stays in memory and can fulfill multiple requests. In contrast, a CGI program disappears once it has fulfilled a request. The persistence of Java applets makes them faster because there\'s no wasted time in setting up and tearing down the process.

4. What are Applets?
A program designed to be executed from within another application. Unlike an application, applets cannot be executed directly from the operating system. With the growing
popularity of OLE (object linking and embedding), applets are becoming more prevalent. A

well-designed applet can be invoked from many different applications.
Web browsers, who are often equipped with Java virtual machines, can interpret applets from Web servers. Because applets are small in files size, cross-platform compatible, and highly secure (can't be used to access users\' hard drives), they are ideal for small Internet applications accessible from a browser.

5. What do you mean by Server-side?
Occurring on the server side of a client-server system. For example, on the World Wide Web, CGI scripts are server-side applications because they run on the Web server. In contrast,
JavaScript scripts are client-side because they are executed by your browser (the client). Java
applets can be either server-side or client- side depending on which computer (the server or the client) executes them.

6. Explain the life cycle methods of a Servlet.
The javax.servlet.Servlet interface defines the three methods known as life-cycle method.
public void init(ServletConfig config) throws ServletException
public void service(ServletRequest req, ServletResponse res) throws ServletException, IOException

public void destroy()

First the servlet is constructed, then initialized wih the init() method.

Any request from client are handled initially by the service() method before delegating to the doXxx() methods in the case of HttpServlet.

The servlet is removed from service, destroyed with the destroy() methid, then garbaged collected and finalized.

7. What is the difference between the getRequestDispatcher(String path) method of

javax.servlet.ServletRequest interface and javax.servlet.ServletContext interface?

The getRequestDispatcher(String path) method of javax.servlet.ServletRequest interface accepts parameter the path to the resource to be included or forwarded to, which can be relative to the request of the calling servlet. If the path begins with a \"/\" it is interpreted as relative to the current context root.

The getRequestDispatcher(String path) method of javax.servlet.ServletContext interface cannot accepts relative paths. All path must sart with a \"/\" and are interpreted as relative to curent context root.

8. Explain the directory structure of a web application.

The directory structure of a web application consists of two parts. A

private directory called WEB-INF

A public resource directory which contains public resource folder.

WEB-INF folder consists of

1. web.xml
2. classes directory
3. lib directory

9. What are the common mechanisms used for session tracking?

Cookies

SSLsessions

URL- rewriting

10. Explain about Session tracking.

A session is basically a conversation between a browser and a server. All the above technologies can save information for the current session for a particular user visiting a site. The session is important, as H1TP is a stateless protocol. This means that the connection between web server and a web browser is not automatically maintained, and that the state of a web session is not saved.

State is a general term that includes \"everything about your situation\" and the specifics vary based on the application. In a word processor, the state of the application would include which windows are open, where they are on the screen, and what files you most recently used.

In a web application, the state would include any data that you had entered, the results of any queries that you had run, and your security access information (e.g. whether you have logged in to the site).

11. Explain ServletContext

ServletContext interface is a window for a servlet to view it\'s environment. A servlet can

use this interface to get information such as initialization parameters for the web applicationor servlet container\'s version. Every web application has one and only one ServletContext and is accessible to all active resource of that application

12. What is preinitialization of a servlet?
A container doesnot initialize the servlets ass soon as it starts up, it initializes a servlet when it receives a request for that servlet first time. This is called lazy loading. The servlet specification defines the <load-on-startup> element, which can be specified in the deployment descriptor to make the servlet container load and initialize the servlet as soon as it starts up. The process of loading a servlet before any request comes in is called preloading or preinitializing a servlet.

13. What is the difference between Difference between doGet() and doPost()?
A doGet() method is limited with 2k of data to be sent, and doPost() method doesn\'t have this limitation. A request string for doGet() looks like the following:
http://www.allapplabs.com/svt1?p1=v1&p2=v2&...&pN=vN
doPost() method call doesn\'t need a long text tail after a servlet name in a request. All parameters are stored in a request itself, not in a request string, and it\'s impossible to guess the data transmitted to a servlet only looking at a request string.

14. What is the difference between HttpServlet and GenericServlet?
A GenericServlet has a service() method aimed to handle requests. HttpServlet extends GenericServlet and adds support for doGet(), doPost(), doHead() methods (HTTP 1.0) plus doPut(), doOptions(), doDelete(), doTrace() methods (HTTP 1.1).
Both these classes are abstract.

15. What is the difference between ServletContext and ServletConfig?
ServletContext: Defines a set of methods that a servlet uses to communicate with its servlet container, for example, to get the MIME type of a file, dispatch requests, or write to a log file.The ServletContext object is contained within the ServletConfig object, which the Web server provides the servlet when the servlet is initialized ServletConfig: The object created after a servlet is instantiated and its default constructor is read. It is created to pass

UNIT - IV

1. WHAT IS THE USE OF XML NAMESPACE?

• XML allows document authors to create custom elements.

• This extensibility can result in naming collisions (i.e. different elements that have the same name) among elements in an XML document.

• An XML namespace is a collection of element and attribute names. Each namespace has a unique name that provides a means for document authors to unambiguously refer to elements with the same name (i.e. prevent collisions).

2. WHAT ARE THE USES OF XML?

• CML – Chemical Markup Language – for chemical equations

• MML - Mathematical Markup Language – for Mathematical equations and derivations.

• Used in bio medical line.

3. WHAT IS THE USE OF XML?

Extensible Markup Language, derived from SGML (Standard Generalized Markup Language. XML is widely supported open technology (i.e. non-proprietary) for electronic data exchange and storage.

XML is actually a language used to create other markup languages to describe data in a structured manner.

• XML documents contain only data, not formatting instructions, so applications that process XML documents must decide how to manipulate or display the document's data.

4. WHAT DO YOU MEAN BY DTD IN XML?

• DTD means Document Type Definition.

• DTD file is similar to CSS file, because DTD also contains only styles.

• DTD contains various styles which are to be applied in XML document .

• Like .CSS file .DTD file also should be linked with XML program.

Styles in XML program should be save with .xsl (Xml Style Sheet Language) extension.

5. Define XML.

• XML is a meta-markup language that provides a format for describing structured data. This facilitates more structured declarations of content and more meaningful search results across multiple platforms.

6. Define DTD.

• A DTD is a set of rules that specifies how to use XML markup. It contains specifications for each element, including what the element\'s attributes are, what values the attributes can take on and what elements can be contained in others.

7. What are the XML rules for distinguishing between the content of a document and the XML markup element?

1.The start of XML markup elements is identified by either the less than symbol (<) or the ampersand (&) character

2.Three other characters, the greater than symbol (>), the apostrophe or single quote (') and the double quotation marks (") are used by XML for markup.

3.To use these special characters as content within your document, you must use the corresponding general XML entity.

8. What are the different XSLT elements?

- Stylesheet
- Value-of
- For-each
- Sort
- Text

9. What is VoiceXML?

VoiceXML is an emerging standard for speech-enabled applications.Its XML syntax defines elements to control a sequence of interaction dialogs between a user and an implementation platform. VoiceXML uses XML text to drive voice dialogs.

10. What is XQuery?

XQuery is a W3C initiative to define a standard set of constructs for querying and searching XML documents. XQuery brings database query processing to XML.

11. What is XForm?

XForm is an XML approach that overcomes the limitations of HTML forms. XForm includes a variety of buttons, scrollbars and menus. It generates XML form data as output. XForm\'s model has the capability to work with the variety of user interfaces.

12. What is XPath?

Xpath is used to navigate XML tree structures. XPath gets its name from its use of a path notation to navigate through the hierarchical tree structure of an XML document. It is an important XML technology due to its role in providing a common syntax and semantics for functionality in both XSLT and XPointer.

13. what are complex types?

complex types are an important aspects of xml schema that allow application developers to define application-specific datatypes that can be checked by programs that check XML document for validity. XML schema divides complex types into two categories: those with simple content & those with complex content.

14. What all are the presentation technologies?

CSS - cascading syle sheets

XSL - provides users with ability to describe how xml data & document are to be formated.

Xforms - it is a GUI toolkit for creating user interfaces & delivering the results in XML.

Xhtml - it is used yo replace HTML with more flexable approach to display webcontent.

VoiceXML - it is an emerging standard for speech enabled application.

15. what are all the Transformation techniques?

XSLT - it is an XML- based languages used to transform XML documents into others format such as HTML for web display.

XLINK - highlighting that element or taking the user directly to that point in the document.

XPATH - xpath gets its name from its use of a payh notation to navigate through the hierarchical tree structure of an XML document XQUERY - it is w3c initiative to define a standard set of constructs for querying & searching XML document.

16. .Explain any two XForm implementations?

X-Smiles - it is a java based XML browser.it implements a large part of X-forms & uses Xform

together with XSL-FO on user interface side. Mozquito Xforms preview - is an XML

based Web developement s/w that implements Xforms & gives current Web browser the

ability to send,receive & process XML document.

17. what are the Importants of SAX?

SAX is an event driven.

SAX supports processing pipelines.

SAX requires programmers to maintain state.

18. What is metadata?

Literally data about data. XML element and attribute names are considered

metadata in that they may be used to describe the data contained in a document. Metadata isn't needed but it certainly helps.

19. What is DTD? How is it different from XML?

DTD stands for Document Type Definition

DTD is a description of the structure & the elements and attributes that define a class of XML document.

DTD can be declared both internally in a XML document and as an external reference.

DTD Xml Schema

Dtd is used to define the structure of an xml document.

Xml schema is used to define the structure of an xml document.

Data type for elements limited to text. 2. Numerous predefined data types available.

Complex data types cannot be defined. 3. Ability to define complex type that map to application data structure.

Dtd document is stored as "filename.dtd" 4.Xml schema document is stored as "filename.xml"

20. What is XML? How it is different from HTML?

Xml is the text based make up language that stores the data in a structured format using meaningful tags. It allows computers to store and exchange data in a format that can be interpreted by any other computer with different hardware or software specification.

XML

HTML

.xml stands for Extensible markup language

HTML stands for Hyper Text Mark Up

Language.2.Several languages are derived from xml & wml

HTML can be derived from xml.

Xml uses indefinite, user defined,

meaningful set of tags which can be used to include XML data in the webpage.

HTML uses a fixed set of tags which can be used to specify the appearance of the webpage.

21. Define Directives.

• Directives are JSP elements that provide global information about an entire JSP page,

22. Write down the various attributes for the page directives in JSP.

• The page directive defines information that will be globally available for that Java Server Page,

• language

• extends

• import

• session

• buffer

• contenttype

23. What is a Hidden Comment?

A comments that documents the JSP page but is not sent to the client. The JSP engine ignores a hidden comment, and does not process any code within hidden comment tags. A hidden comment is not sent to the client, either in the displayed JSP page or the HTML page source. The hidden comment is useful when you want to hide or \"comment out\" part of your JSP page. You can use any characters in the body of the comment except the closing --%> combination. If you need to use --%> in your comment, you can escape it by typing --%\\>.
JSPSyntax
<%-- comment --%>
Examples
<%@ page language=\"java\" %>
<html>

<head><title>A Hidden Comment </title></head>
<body>
<%-- This comment will not be visible to the colent in the page source --%>
</body>
</html>

25. What is a Expression?

An expression tag contains a scripting language expression that is evaluated, converted to a String, and inserted where the expression appears in the JSP file. Because the value of an expression is converted to a String, you can use an expression within text in a JSP file. Like
<%= someexpression %>
<%= (new java.util.Date()).toLocaleString() %>
You cannot use a semicolon to end an expression

26. What is a Declaration?

A declaration declares one or more variables or methods for use later in the JSP source file. A declaration must contain at least one complete declarative statement. You can declare any number of variables or methods within one declaration tag, as long as they are separated by semicolons. The declaration must be valid in the scripting language used in the JSP file.
<%! somedeclarations %>
<%! int i = 0; %>
<%! int a, b, c; %>

27. What is a Scriptlet?

A scriptlet can contain any number of language statements, variable or method declarations, or expressions that are valid in the page scripting language.Within scriptlet tags, you can
1.Declare variables or methods to use later in the file (see also Declaration).
2.Write expressions valid in the page scripting language (see also Expression).
3.Use any of the JSP implicit objects or any object declared with a <jsp:useBean> tag.
You must write plain text, HTML-encoded text, or other JSP tags outside the scriptlet. Scriptlets are executed at request time, when the JSP engine processes the client request. If the scriptlet produces output, the output is stored in the out object, from which you can display it.

28. What are implicit objects? List them?

Certain objects that are available for the use in JSP documents without being declared first. These objects are parsed by the JSP engine and inserted into the generated servlet. The implicit objects re listed below

request
response
pageContext
session
application
out
config
page
exception

29. Difference between forward and sendRedirect?

When you invoke a forward request, the request is sent to another resource on the server, without the client being informed that a different resource is going to process the request. This process occurs completly with in the web container. When a sendRedirtect method is invoked, it causes the web container to return to the browser indicating that a new URL should be requested. Because the browser issues a completly new request any object that are stored as request attributes before the redirect occurs will be lost. This extra round trip a redirect is slower than forward.

30. What are the different scope valiues for the <jsp:useBean>?

The different scope values for <jsp:useBean> are

page
request
session
application

31. Explain the life-cycle mehtods in JSP?

THe generated servlet class for a JSP page implements the HttpJspPage interface of the javax.servlet.jsp package. Hte HttpJspPage interface extends the JspPage interface which inturn extends the Servlet interface of the javax.servlet package. the generated servlet class thus implements all the methods of the these three interfaces. The JspPage interface declares only two mehtods - jspInit() and jspDestroy() that must be implemented by all JSP pages regardless of the client-server protocol. However the JSP specification has provided the HttpJspPage interfaec specifically for the JSp pages serving HTTP requests. This interface declares one method _jspService().

The jspInit()- The container calls the jspInit() to initialize te servlet instance.It is called before any other method, and is called only once for a servlet instance.
The _jspservice()- The container calls the _jspservice() for each request, passing it the request and the response objects.
The jspDestroy()- The container calls this when it decides take the instance out of service. It is the last method called n the servlet instance.

32. What is a output comment?

A comment that is sent to the client in the viewable page source.The JSP engine handles an output comment as uninterpreted HTML text, returning the comment in the HTML output

sent to the client. You can see the comment by viewing the page source from your Web browser.

JSP Syntax

<!-- comment [<%= expression %>] -->

Example 1

<!-- This is a commnet sent to client on

<%= (new java.util.Date()).toLocaleString() %>-->

Displays in the page source:

<!-- This is a commnet sent to client on January 24, 2004 -->

33. Define ASP.

Active Server Pages (ASP) is a server-side scripting technology that can be used to create dynamic and interactive web applications.

34. What are the ASP objects?

1.Application -It manages your web application.

2.Session -It manages and tracks individual user sessions.

3.Server -It controls behavior of your web server

4.Response -It transmits information from the web server to web browser

5.Request -It retrieves information from the browser for processing at the server.

35. What is global.asa file?

The global.asa file is a Active Server Application file you can track and manage the application and session events, variables and objects. When you start the application the server will load the global.asa file into memory.

36. Define response object and list its methods.

The response object transmits information from the web server to browser.

Methods are:

1.Write

2.BinaryWrite

3.Redirect

4.AppendToLog

5.AddHeader

6.Clear

7.Flush

37. Define JSP.

Java Server Pages (JSP) are simple technology used to generate dynamic HTML on the server side.

38. Define Directives.

Directives are JSP elements that provide global information about an entire JSP page,

39. Write down the various attributes for the page directives in JSP.

The page directive defines information that will be globally available for that Java Server Page,

1. language

2. extends

3. import

4. session

5. buffer

6. contenttype

40. Define XML.

XML stands for EXtensible Markup Language

XML is a markup language much like HTML
XML was designed to carry data, not to display data
XML tags are not predefined. You must define your own tags
XML is designed to be self-descriptive
XML is a W3C Recommendation

41. .Define DTD.

A Document Type Definition (DTD) defines the legal building blocks of an XML document. It defines the document structure with a list of legal elements and attributes.
A DTD can be declared inline inside an XML document, or as an external reference.

UNIT - V

1. What is SOAP? (Simple Object Access Protocol)

• SOAP is an XML based protocol that allows applications to easily over the internet using XML documents called AOAP message.

• A SOAP message contains an envelope, which is a structure that describes a method call.

• A SOAP message's body contains either a request or a response.

• A request message's body contains a Remote Procedure Call (RPC), which is a request for another machine to perform task.

• The RPC specifies the method to be invoked and any parameters the method takes.

• The application sends the SOAP message via an HTTP POST. A SOAP response message is an HTTP response document that contains the results from the methods call (e.g. return values, error messages.)

2. WHAT IS THE USE OF WEB SERVICES?

• Web services encompass a set of related standards that can enable two computer

• The data is passed back and forth using standard protocols such as HTTP, the same protocol used to transfer ordinary web pages.

• Web services operate using open, text-based standards that enable components written in different languages and on different platforms to communicate.

• They are ready to use pieces of software on the Internet. XML, SOAP, Web Services Description Language (WSDL) and Universal Description, Discovery and Integration (UDDI) are the standards on which web services rely.

• UDDI is another XML based format that enables developers and business to publish and locate Web services on a network.

3. What do you mean by JDBC?

• JDBC Part of the Java Development Kit which defines an application-programming interface for Java for standard SQL access to databases from Java programs.

4. Define ODBC.

• It is a standard for accessing different database systems. There are interfaces for Visual Basic, Visual C++, SQL and the ODBC driver pack contains drivers for the Access, Paradox, dBase, Text, Excel and Retrieve databases.

5. What are the advantages of web services?

Reusable application-components.

There are things applications need very often. So why make these over and over again?

Web services can offer application-components like: currency conversion, weather reports, or even language translation as services.

Connect existing software.

Web services can help to solve the interoperability problem by giving different applications a way to link their data.

With Web services you can exchange data between different applications and different platforms.

6. List out some web service technologies?

XML,
SOAP
,
WSD
L

7. What is XML ?

Extensible markup language. It offer a standard, flexible and inherently extensible data format, XML significantly reduces the burden of deploying the many technologies needed to ensure the success of Web services.

8. What is SOAP?

Service Oriented Architecture Protocol.

It provides a standard, extensible, composable framework for packaging and exchanging XML messages. In the context of this architecture, SOAP also provides a convenient mechanism for referencing capabilities (typically by use of headers).

9. What is WSDL?

Web Services Description Language

WSDL is a language for describing Web services. WSDL describes Web services starting with the messages that are exchanged between the requester and provider agents. The messages themselves are described abstractly and then bound to a concrete network protocol and message format.

10. What are Web Services?

Web services are application components

Web services communicate using open protocols

Web services are self-contained and self-describing

Web services can be discovered using UDDI Web

services can be used by other applications XML is

the basis for Web services

11.How Does web services Work?

The basic Web services platform is XML + HTTP.

XML provides a language which can be used between different platforms and programming languages and still express complex messages and functions.

The HTTP protocol is the most used Internet protocol.

12. WHAT ARE THE VARIOUS Web services platform elements?

• SOAP (Simple Object Access Protocol)

• UDDI (Universal Description, Discovery and Integration)

• WSDL (Web Services Description Language)

13. WHAT ARE THE TYPES OF Web SERVICES AND ITS USES?

Reusable application-components.

There are things applications need very often. So why make these over and over again?

Web services can offer application-components like: currency conversion, weather reports, or even language translation as services.

Connect existing software.

Web services can help to solve the interoperability problem by giving different applications a way to link their data.

With Web services you can exchange data between different applications and different platforms.

14. WRITE SHORT NOTES ON Web Services Technologies?

Web service architecture involves many layered and interrelated technologies. There are many ways to visualize these technologies, just as there are many ways to build and use Web services.

15. WRITE SHORT NOTES ON SOAP.

SOAP 1.2 provides a standard, extensible, composable framework for packaging and

exchanging XML messages. In the context of this architecture, SOAP 1.2 also provides a convenient mechanism for referencing capabilities (typically by use of headers).

[SOAP 1.2 Part 1] defines an XML-based messaging framework: a processing model and an exensibility model. SOAP messages can be carried by a variety of network protocols; such as HTTP, SMTP, FTP, RMI/IIOP, or a proprietary messaging protocol.

16. DEFINE WSDL.

WSDL 2.0[WSDL 2.0 Part 1] is a language for describing Web services.

WSDL describes Web services st

arting with the messages that are exchanged between the requester and provider agents. The messages themselves are described abstractly and then bound to a concrete network protocol and message format.

17. Draw the architecture of UDDI.

18. WRITE SHORT NOTES ON UDDI

Universal Description, Discovery, and Integration (UDDI) The directory shown in the above figure could be a UDDI registry. The UDDI registry is intended to eventually serve as a means of \"discovering\" Web Services described using WSDL . The idea is that the UDDI registry can be searched in various ways to obtain contact information and the Web Services available for various organizations. How much \"discovery\" will be used in the early days of Web Services is open to discussion. Nevertheless, even without the discovery portion, the UDDI registry is a way to keep up-to-date on the Web Services your organization currently uses. More on Universal Description, Discovery, and Integration (new window). An alternative to UDDI is the ebXML Registry (new window).

19. EXPLAIN DTD for XML Schemas

☐XML documents are processed by applications☐

☐Applications have assumptions about XML documents

☐DTDs allow to formalize some of these constraints

☐Part of the constraint checking must still be programmed

20. WHAT ARE Modeling DTDs.?

Data models can be mapped to many different DTDs☐

What is a good DTD? What is a bad DTD?☐

How does the DTD affect further processing☐

21. WHAT ARE THE SOAP Related Technologies?

SOAP is a simple XML-based protocol to let applications exchange☐information over☐ HTTP.

In our SOAP tutorial, you will learn what SOAP is, and how it uses XML to☐exchange information between applications.

22. DEFINE SOAP structure

SOAP once stood for \'Simple Object Access Protocol\' but this acronym was dropped with Version 1.2 of the standard.[1] Version 1.2 became a W3C recommendation on June 24, 2003. The acronym is sometimes confused with SOA, which stands for Service-oriented architecture; however SOAP is different from SOA.

23. What is SOAP?

• SOAP stands for Simple Object Access Protocol

• SOAP is a communication protocol

• SOAP is for communication between applications

- SOAP is a format for sending messages
- SOAP communicates via Internet
- SOAP is platform independent
- SOAP is language independent
- SOAP is based on XML
- SOAP is simple and extensible
- SOAP allows you to get around firewalls