UNIT II

1. **Define RIA.**

   A rich Internet application (RIA) is a Web application designed to deliver the same features and functions normally associated with deskop applications. RIAs generally split the processing across the Internet/network divide by locating the user interface and related activity and capability on the client side, and the data manipulation and operation on the application server side.

2. **What is web 2.0?**

   A Web 2.0 site may allow users to interact and collaborate with each other in a social media dialogue as creators of user-generated content in a virtual community, in contrast to Web sites where people are limited to the passive viewing of content. Examples of Web 2.0 include social networking sites, blogs, wikis, folksonomies, video sharing sites, hosted services, Web applications, and mashups.

3. **Define collaboration**.

   Collaboration is a process defined by the recursive interaction of knowledge and mutual learning between two or more people who are working together, in an intellectual endeavour, toward a common goal which is typically creative in nature.

4. **List the Collaborations tools**.

Tool	Use
Google Docs	Upload/modify/retrieve files anytime
Dropbox	Store/share/sync files online
Blogger	Blogging site of google
Wordpress	Flexible, FOSS, easy blogging tool
PDFcatch	e-books, PDF search engine
SlideShare	PPT, PDF share/upload/download
Youtube	Upload/download/view videos
Facebook	Upload/download/view micro contents
Twitter	Upload/doenload/view thoughts

5. **What is a collaboration tool? What are its features?**

Collaboration tools allow a group of people work together virtually in real-time over the internet.

Features:-
   a. Easy to use and set up.
   b. Clean interface
   c. Secure
   d. Permissions control
   e. Ability to upload documents
   f. File storage
   g. Scalable
   h. Document locking

6. **Define website.**

A website is defined as a collection of web pages linked together that has a unique domain name, that can be accessed from anywhere across the globe over internet. It is hosted by a web server and viewed by web clients. It can be developed in HTML, JavaScript, DHTML, PHP, etc.

7. **What is the difference between website and web server?**

website	web server
It is a collection of web pages	It is a server on which web application is executed
It is a software application that has unique domain name	It is a physical entity that has unique IP address
It can host many web pages	It can host many websites
They communicate with web server	They communicate with other servers such as DB server, File server, etc
Web server = HTML&CSS + JS+ DHTML	It receives request and gives corresponding response
Ex: https://www.google.co.in	Ex: IIS, Apache

8. **Define web crawler.**

A web crawler is defined as the ability of the web to parse a web page into different semantic elements (navigation links, friend links, group links, etc) and extract the social network and other associated data.

9. What is URL?

Uniform Resource Locator (URL) is defined as an unique address for the file that has to be accessed over the internet. If we want to access a website, we enter its URL in the address bar of the web browser.

Syntax: protocol: //www.exampleDomain.com/path/filename

Ex: https://www.vit.ac.in / home.aspx

10. What is IP?

Internet Protocol (IP) is a network layer protocol which consists of addressing information that is the fundamental protocol which is being used by data packets over the internet. Using this protocol, communication between uniquely addressed computers has been made possible.

11. What is HTTP?

Hyper Text Transfer protocol (HTTP) is a request/Response, stateless protocol for communication, to transfer information on LAN and WWW

It is used to deliver files virtually and other data on WWW

It takes place through TCP/IP sockets

A browser is a HTTP client – sends HTTP request

A web server is a HTTP server – sends HTTP reply

It uses port no: 80 (HTTP servers listen to this port)

12. What are the protocols used in email?

SMTP

Connection-oriented

Text-based

Works in application layer

ACK is available

It uses port 25

POP

It uses port 110

Current version:POP3

Single client

Offline email access

Can't search email

Download is needed

Only 1 mailbox

Less internet usage

IMAP

Manipulate email

No downloading

Can't transfer email

Access the received emails

Search the mails

Many mailboxes

More internet usage

13. **Differentiate internet and intranet.**

Internet	Intranet
Network of networks, open for all	Network of computers, for closed group
Limited no. of users	Unlimited no. of users
Different sources of information	Limited sources of info
Large no. of intranets	Less number of systems
Internet =LAN + WAN + MAN	Intranet = LAN | WAN | MAN

14. **What are the flavors of XHTML?**

XHTML 1.0 Strict : When we want a clean mark-up code

XHTML 1.0 Transitional: To use HTML features

XHTML 1.0 Frameset: To make use of frames

15. **What is XHTML?**

Extensible HTML is the extended version of HTML that has strict rules when compared to HTML

It is more consistent, well-structured document

Web pages made in XHTML can be easily understood by the present and future web browsers

16. **What is the use of forms in HTML?**

HTML form element is used to allow a user to give input data on the web page.

To create registration forms, login forms, getting user info, conducting surveys

<form>……..</form> tags are used

Attributes used: action, method

Ex:

<form action = http://www.google.co.in/ method = post>

</form>

17. What is the use of frames in HTML?

It allows the web developers to present the web document in multiple views

Using this, within a same window, one can keep some information visible, other part of web page to contain some other information, other part of web page can be reloaded.

Ex: one frame can display company info, second frame can display navigation menu, etc

18. Why HTTP is stateless protocol?

HTTP cannot remember previous user information

It does not recall the number of page visits

It means it cannot remember its previous states.

That is the reason why HTTP is stateless protocol.

19. What are HTML tags? Give examples.

An HTML tag is defined as a command that tells the web browser, how to display the text, audio, video, and graphics on a web page when loaded.

They are mentioned in a pair of angular brackets < >

<html>..</html>

<head>…</head>

<title>…</title>

<body>…</body>

<h1>…</h1>

<hr/>

<p>…</p>

20. Write a HTML5 code to display:

A	B
C	D

< ! DOCTYPE HTML>

<HTML>

<HEAD></HEAD>

<BODY>

```
<TABLE BORDER=”4”>
<TR>
<TD>A</TD>
<TD>B</TD>
</TR>
<TR>
<TD>C</TD>
<TD>D</TD>
</TR>
</TABLE>
</BODY>
</HTML>
```

21. Write a HTML5 code to play an audio file.

```
<!DOCTYPE HTML>
<HTML>
<HEAD></HEAD>
<BODY>
<AUDIO CONTROLS>
<SOURCE SRC="song1.MP3" TYPE="AUDIO/MPEG">
</AUDIO>
</BODY>
</HTML>
```

22. Write an HTML5 code to display a video file.

```
<!DOCTYPE HTML>
<HTML>
<HEAD></HEAD>
<BODY>
<VIDEO WIDTH = "400" HEIGHT = "300" CONTROLS>
<SOURCE SRC="kochadaiyaan.mp4" TYPE="VIDEO/MP4">
</VIDEO>
</BODY>
</HTML>
```

23. What is CSS? What are its types?

   Cascading style sheet is defined as a style sheet in which, all the style information of a web page can be defined.

   It separates the contents and the decoration of a HTML page

   It helps developers to give consistent appearance to all the elements in the web page.

   Types:-

   Inline style sheets <p style="color:green; font-size:15px">

   Embedded style sheets <style>……</style>

   External style sheet Stored in a separate file (ex.css)

   Imported style sheets @import URL(path)

24. What are the types of positioning in CSS?

   Relative positioning

   Absolute positioning

   Float positioning

25. List the basic protocols used in internet.

- FTP
- HTTP
- SNMP
- SMTP
- POP3
- IMAP
- TCP
- UDP
- IP

26. What are the technologies used in RIA?

   HTML5+CSS3, Java script, JS framework, jQuery, jQuery Mobile, AngularJS, SmartClient, GWT, JavaFX, Flex, MS Silverlight

27. How does a Rich Internet Application differ from a traditional web application?
   1. Rich Assets

- A traditional website is mainly made up of Text (plus a few pictures).

- RIA has more assets to deal with, such as Audio, Graphic, Video, State, Transition, and Effect. It is Interaction-Based.

2. Rich Experience

- The richness of RIA means rich user experience.

3. Rich Functionality

- Powered by the latest web technologies such as Adobe Flex/Flash, AJAX, or Microsoft SilverLight, A RIA can provide functions way beyond traditional web pages. Just look at PhotoShop Express or Google Docs, you will see they act more like a desktop application. This is unbelievable in the past.

4. Rich Communication

- The traditional way to operate a web application is like:

Click a button => Wait for the result page showing => Click another button

Whenever users ask for something, the browser has to send a HTTP request to the server, wait for the response back from the server, and refresh the page. This synchronous communication method inevitably creates negative impact on usability.

- While RIA normally uses Asynchronous communication method. It allows the application to get the data from the server without the page reload. It makes the application faster and more user-friendly.

28. Write the functions of a web server.
1. Stores and secures website data:
   - In web hosting services, a web server stores all website data and secures it from unauthorized users when it is properly configured.
2. Provides web database access:
   - A web server's responsibility is to provide access to websites that are hosted. Web hosting service providers own some web servers that are

used in variable ways to provide different web hosting services, such as backend database servers.

3. Serve the end user requests:

- Web servers accept requests from different users connected over the internet and serve them accordingly.

4. Bandwidth controlling to regulate network traffic:

- It is a feature available in web server to minimize excess network traffic. Web Hosts can set bandwidth values to regulate the rate of data transmission over the internet. This feature avoids the down time caused by high web traffic.

5. Server side web scripting:

- This feature of web server enables the user to create dynamic web pages. The popular server side scripting languages include Perl, Ruby, Python, PHP and ASP etc

29.   What is selector string?

The rule set in CSS consists of selector string which is basically an HTML element. These selectors can be defined with the help of properties and values.
    Syntax:
        Selector {property: value;}

30.   Define HTML.

HTML is a simple web page description language, which enables document creation for the web. HTML is the set of mark-up symbols or codes placed in a file intended for display on the web browser page. These mark-up symbol and codes identify structural elements such as paragraphs, heading, and lists. HTML can be used to place media (such as graphics, video, and audio) on the Web page and describe fill-in-forms. A method is an implementation of an objects behavior.