CHAPTER 9: WEB APPLICATION DEVELOPMENT

Web Application: A web application refers to an application which sends and receives information through WWW over internet. It may include hypertext, multimedia, GUI etc.

Web Browser: A client program that enables the user to browse, search and collect information from the web is known as a web browser. It sends the request from the client/user to server for a specific resource and the server then responds with the content of that resource. e.g. Internet explorer, Mozilla Firefox, Google chrome, Opera.

Web server: Web servers are computers on internet on which web pages are stored. Web server stores the web pages and responds to the request made by web browser. e.g.: Apache web server, Microsoft Internet Information Server (IIS), Netscape Enterprise Web server.

URL: The unique address of the website is known as uniform Resource Locator (URL). E.g. the web site of KVS has an address or URL called http://www.kvsangathan.nic.in. It has following parts:-

Protocol: It specifies the type of protocol (set of rules) to be followed by server. Exam: http, https etc.

Domain Name: It specifies the name of the web server on the internet including domain name like .com, .org, .edu or country domain like .in, .ca etc.

Directory path: It specifies Location of file/web page on the server.

Object Name: It specifies the name of specific web page or file like index.html.

Example: http://cbse.nic.in/welcome.aspx

Communication with Web server: The internet on WWW works on client server computing model. In this model client has web browser which works as web client and other machine (remote machine) which request the pages from web server. A web server follows some protocols like HTTP, HTTPS, FTP etc.

Client Server Computing: Client server computing refer to a network setup in which program, documents and information reside on the server and client can connect with the server using network to access the information. It is of two types:

1. **Static Web Pages**: Static Web pages display the exact information whenever anyone visits it, until you alter that page's source code.
2. **Dynamic Web pages**: Dynamic Web pages are capable of producing different content for different visitors from the same source code file. The website can display different content based on what operating system or browser the visitor is using, whether user is using a PC or a mobile device, or even the source that referred the visitor.

Examples:

Client side computing: Java script, VB Script.

Server side computing: ASP (Active Server Page), PHP (Personal Home Page), JSP (Java Server Page.

Some commonly used internet protocols:

Protocol: A protocol is a set of rules to govern communication between two computers in a network.

HTTP (Hyper Text Protocol): It is used on WWW for transferring web pages and files contained in web pages such as images.

FTP (File Transfer Protocol): It is used for transferring files from one machine to the other**.**

SMTP (Simple Mail Transfer Protocol): It is used for email.

Telnet: It is used to open remote machine access (telnet) session.

Very Short Answer Type Question (1 Marks)

1. What is URL?
2. Explain WWW.
3. Identify the client side and server side technologies.
   Java Script, ASP (**A**ctive **S**erver **P**ages), PHP (**H**ypertext **P**re **P**rocessor), JSP(**J**ava **S**erver **P**ages)
4. In the URL http://kvsangathan.nic.in/Circulars.aspx What is the http component?
5. A program that serves requested web pages or documents are known as:
   (I) Web page (ii) URL (iii) Web server (iv) None of these.
6. The address of a web site/ resources on the internet is known as:
   (I) HTTP (ii) URL (iii) WWW (iv) None of these.
7. Identify from the following which is not a web browser:
   (I) Mozilla Firefox (ii) Opera (iii) Netscape Navigator (iv) MS Word
8. Identify web server software from the following:
   (I) Apache (ii) MS Word (iii) Mozilla Firefox (iv) HTML

Short Answer Type Question (2 Marks)

1. What is URL? What are its components? Explain with example.
2. What is a protocol? Write the names of any two internet protocols.
3. What is a Web Browser? Write the names of any two web browsers.
4. What is client server computing?
5. Difference between static web page and dynamic web page.