Internet: Internet is a network of electronic devices and gadgets (Computers, Laptops, Tablets, and Mobiles etc.) all around the globe. It is also a network of networks spread across the globe, all of which are connected to each other.

Applications areas of Internet -

- 1) Searching information
- 2) Communicating with family and friends located at far off places
- 3) Meeting new people
- 4) Entertainment and fun
- 5) Discussion forums
- 6) Education and learning
- 7) E-commerce
- 8) Video conferencing
- 9) Social Networking
- 10) Blogs

Internet Requirements: An internet connection requires the following things:-

- 1) Computer System
- 2) MODEM
- 3) Telephone
- 4) Internet Service Provider(ISP)
- 5) Internet Access Software
- 6) Internet Browser Software

Internet Service Provider (ISP): The companies that provide the internet facilities to the user are known as internet service providers. Examples: BSNL, MTNL, Aircel, Tata Docomo, Vodafone, Idea, Reliance, Jio etc.

World Wide Web (WWW): The web in which all the companies of the world are connected through internet is called www. It is the world's largest library.

Websites: A website is a collection of web pages on the internet that provides information about a particular topic.

Examples: www.google.com, www.yahoo.com, www.facebook.com and many more.

Web Page: A web page is a single page of any website on internet that provides information about a particular topic. They are text documents that contain commands with extensions such as .html, .htm, .asp, .php, .xml etc.

Examples: www.google.com/index.html, www.yahoo.com/home.htm and many more.

Home Page: The very first page or the index page of any website is known as home page. Examples: www.google.com/index.html, www.yahoo.com/home.htm, and many more.

Note: Every home page is a web page but every web page is not a home page.

Search Engine: Search Engines are websites/programs that are used to search information on the World Wide Web based on the keywords or characters specified by the user. The keywords may or may not bring the result or information. The information shown by the search engines may be a mix of web pages, images and other types. Some of the popular search engines are:-

- 1) www.google.com
- 2) www.yahoo.com
- 3) www.msn.com
- 4) www.bing.com
- 5) www.ask.com
- 6) www.baidu.com

Note: Every search engine is a website but every website is not a search engine.

Domain Name: A domain name is the website name and the address where internet users can access a website. A domain name is used for finding and identifying server computers on the internet having webpage stored on them. Computers use IP Address, which are a series of numbers. However, it is difficult for humans to remember string of numbers. Thus, domain names were developed and used to identify websites on internet instead of using IP Address. Rules for creating a Domain Name: Rules to create a domain name are as follows:

- 1) A domain name should be catchy and easy to remember.
- 2) A domain name can be any combination of letters and numbers.
- 3) It can be used in combinations of various domain name extensions such as .com, .net, .org, .in,.us,.uk,.au,.nz and many more.
- 4) The domain name must be registered before you use it.
- 5) Every domain name is unique.
- 6) Two websites can have the similar domain names but not same.

Web Server: Servers are powerful computers connected to individual computers that stores files and information in the form of websites which can be accessed by different users from anywhere in the world using internet connection.

Features of a server are:

- 1) High Processing Speed
- 2) High Storage Capacity (HDD)
- 3) High Memory (RAM)
- 4) Require Special Coolants

- 5) Run 24/7
- 6) Has a unique IP address and domain name.

Web Space: The amount of space on a server that is allotted to website owners to park/store their website and website content/resource is known as web space. It is allotted to websites by various web hosting companies.

Web Hosting: Web hosting is the process of uploading/saving the web content on a web server to make it available on WWW. In case an individual or a company wants to make its website available on the internet, it should be hosted on a web server.

Uniform Resource Locator (URL): URL is the address of a resource on internet. A URL indicated the location of resource as well as the protocol used to access it. A URL Contains following instructions:

- 1) The protocol used to access the resource.
- 2) The location of server.
- 3) The port number on the server.
- 4) The location of resource in directory structure of server.
- 5) A fragment identifier. Uses of URL: A URL is mainly used to point a webpage, a component of a webpage or a program on website.

Resource name consists of: Resource name consists of the following:

- 1) Domain name identifying a server on the web service.
- 2) A program name or a path to the file or server.

It can specify:

- 1) A path to a specific page or file within a domain.
- 2) A network port to use to make the connection.
- 3) A specific reference point within a file, such as a named anchor in an HTML; and
- 4) A query or search parameters used –commonly found in URL's for search results.

Text Editors: A text editor is a software tool which is used to create or compose web pages. Examples: Notepad, WordPad, Notepad+ etc.

Web Browser: A web browser is an application software tool which is used to display and view WebPages stored on a server.

Characteristics of a Web Browser:

- 1) Web browser is used to navigate the web pages on the internet.
- 2) A web browser interprets the coding language of the web page and displays it in the graphic form.

- 3) A web browser allows anyone to access the web page without even knowing the commands used in the software languages to design a web page.
- 4) A web browser is a client which requests the information from the web server and the server responds to it.
- 5) The web address of the web page/website on the address bar tells the web browser which page to access.

Web browsers are of two types:

- 1) Text Based Browsers: Lynx, Links, Line Mode Browser, WebbIE, Browsh etc.
- 2) Graphic Based Browsers: Netscape Navigator, Internet Explorer, Mozilla Firefox, Google Chrome, Opera, Apple Safari, UC Browser etc.