

Internet

- Internet is the world's largest and globally adopted communication system that links together thousands of individual networks.
- It allows exchange of information between two or more computers on a particular network.
- It helps in transfer of messages through mail, chat, video & audio conference, etc.
- It has become mandatory for day-to-day activities: bills payment, online shopping and surfing, tutoring, working.
- Internet was evolved in 1969, under the project called ARPANET (Advanced Research Projects Agency Network) to connect computers at different universities and U.S. defence.

Introduction to browser

- A browser (web browser) is an application software which enables a user to display and interact with text, images, videos, music and other information that could be on a website.
- Web browsers use to communicate with web servers primarily using HTTP or HTTPS (Hypertext Transfer Protocol) to get the information from webpages.
- Pages are identified by means of a URL (Uniform Resource Locator).

URL Format: The URL format for the website or webpage contains the following parts:

① Protocol ② Name of site ③ Absolute Path

http:// www.jendesign.com /2007/samples/first.html

Host name Domain name Directory Path Document

1) Protocol:

- The first part of a URL is the protocol.
- On the web, we almost always use Hypertext Transfer Protocol (HTTP).

2) Domain name:

- The domain name is the unique identifier of the site.
- Usually, it begins with www.

3) Absolute path:

- The absolute path indicates the location on the web server of the requested file.

4) Directory Path:

- The directory path in the URL tells us where the requested file is located.

5) Document :

→ The last portion of the URL is always a file name, followed by the extension.

Browser	organization
Google Chrome	Google
Mozilla Firefox	Mozilla
Safari	Apple
Internet Explorer	Microsoft
Opera	Opera Software

Introduction To WWW (web)

→ World ~~wide~~ wide web (www), which is also known as a web, is a collection of websites or webpages stored in web servers and connected to local computers through the internet.

→ These websites contain ~~text~~ text pages, digital images, audios, videos, etc.

→ The web was invented in 1991 by Tim Berners-Lee.

Difference between website and webpage

S.No.	Website	Web Page
1.	A website is a collection of different webpages that are linked together with hypertexts.	1) A webpage is a single hypertext document.
2.	It consists of more than one webpage.	2) It is a single document that is displayed on the user's browser.
3.	To develop a website, developers need more skills and more time as compared to a webpage.	3) To develop a webpage, developers need basic <u>HTML</u> knowledge and less time.
4.	It can contain information for different entities, such as apple.com which contains information about its different products.	4) It can contain information for a single entity, such as iPhone 13 page containing information about that model only.
5.	It is a little challenging to create a perfect website and requires lots of programming.	5) It is very simple to create a webpage.

► 2.10. SEARCH ENGINE

1. Search engine is defined as a large database of Internet resource such as websites, web pages, newsgroups, programs, video, images etc.
2. It helps the user to locate information on world wide web.
3. The top search engines used are google, Bing, Yahoo, Ask, AOL Search etc. The Google is the mostly used (87%) search engine in the world and it has approximately 10 billion visitors monthly.

► 2.11. EFFICIENT USE OF SEARCH ENGINE

1. With billions of websites online available today, there is an ocean of information on the internet. Search engine make this information easier to find.
2. When a user searches for a topic or keyword, the search engine will show a list of relevant websites that matches user's search terms known as results. User can click any link to open it.
3. With billions of websites in internet world, a user can waste a lot of time.
4. There are more ways for efficient searching than to just enter any keyword and hit enter.
5. These efficient search techniques are listed and defined as follows.
 - i) use unique and specific terms
 - ii) use quotes for exact phrases.
 - iii) use plus (+) and minus (-) sign
 - iv) use asterisk (*) for proximity search.
 - v) search within a site is a time saving option.
 - vi) use tabs to specify what you are looking for.
 - vii) Calculation
 - viii) Definitions

ix.) Related sites.

x.) Search for multiple word at a time using OR.

xi.) Search a range of number with two dots.

xii.) use important words only.

xiii.) find a specific file type.

► 2.12. DIGITAL INDIA PORTALS.

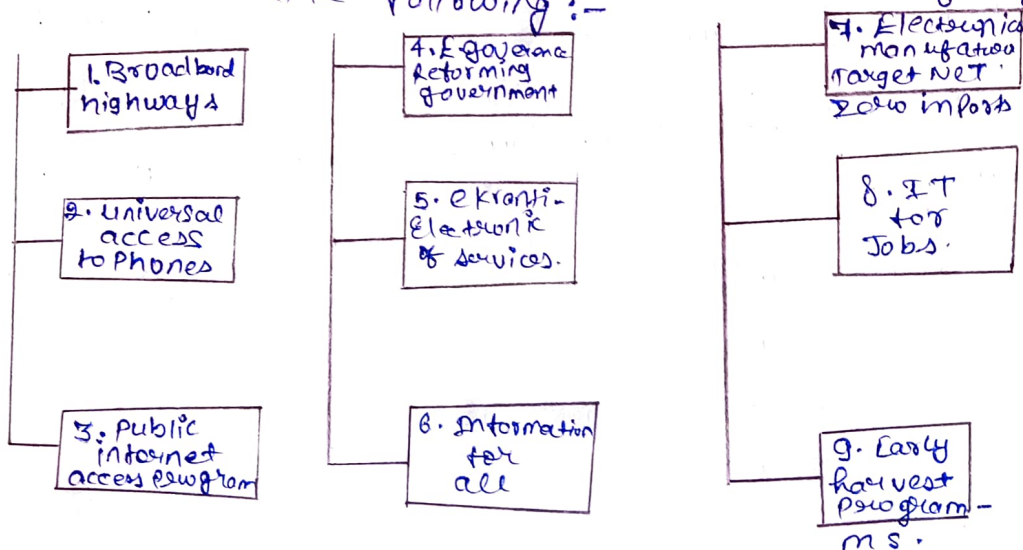
Digital India is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy.

→ This programme was launched on 1st July, 2015 by Hon' Prime Minister Narendra Modi.

→ The vision of the Digital India is centered on three scheme covers many key areas.

1. Digital infrastructure as a utility to every citizen.
2. Governance and services on demand.
3. Digital empowerment of citizens.

There are total nine milestones or missions of Digital India which are as the following :-



* www.digitalindia.gov.in

- Website is meant for creating awareness about the Digital Initiatives in terms of infrastructure, services and empowerment taken by Government of India.
- The website shows the initiatives like Aadhaar enabled Payment System, Bharat Broadband Network Ltd. (BBNL).
- eRtc connect, Beti Bacho Beti Padho, BHM (Bharat Interface for Money).
- National Scholarship Portal (NSP), Passport seva Portal etc.

* www.swayam.gov.in

- SWAYAM which is a programme initiated by Government of India and designed to achieve the three fundamental principles of Education Policy viz, access, equity and quality.
- The objective of this effort is to take the best teaching Learning resources to all.
- All the courses are interactive, prepared by the best teachers in the country and are available, free of cost to any learner.
- More than 1,000 specially chosen faculty and teachers from across the country have participated in preparing these courses.

* www.nptel.ac.in

- National Programme on Technology Enhanced Learning, is a Joint venture of the IITs and IISc, funded by the Ministry of Education (MOE) Government of India, and was launched in 2003.
- Initially, it is started as a project to take quality education to all corners of the country, NPTEL now offers close to 600+ courses for certification every semester in about 22 disciplines.
- It has the largest online repository in the world of courses in engineering, basic sciences and selected humanities and management subjects.

► 2.15. G-DRIVE: (GOOGLE DRIVE)

Google Drive introduced in 2012 is a free, cloud-based file storage system or service that comes with your Google Account.

- It allows you to create, upload, edit, store and share files on your computer, tablet, or smartphone.
- Google Drive provides an easy-to-use, integrated way for teacher and students to work together on projects, and more.

* Features of G-Drive

1. G-Drive: offers 15 gigabytes (GB) of free storage. Additional storage is available with subscription fees.
2. Capable to upload and/or download any kind of document.
3. It includes free desktop publishing software that is available through your Google Drive account.
4. It supports file sharing and allows other Drive users to view, and/or edit files, simultaneously if required.

► 2.15.1 Advantages of Google Drive

1. Anytime, anywhere access:- web-based Google Drive securely stores documents online, allowing authorized user to access them from any computer or mobile device at any time.
→ there's no need to store files on a USB flash drive.
2. Collaboration Support: Google Drive lets users easily invite others to work on the same document, at the same time, without the hassle of attaching and sending documents.
3. Autosave and revision history: continuous autosave ensures that current work is saved, as well as draft edits in progress.
4. Shared folders: files and Docs that are regularly used by teams or groups remain organized and up-to-date without the need to manage and communicate changes.
5. Templates: Pre-made templates for a variety of documents and report kinds make it easier to get started on writing projects.
→ you can also design and share your own document templates to help your students organize their assignments.

Email :

- Email (electronic mail) is a way to send and receive short and long messages across the internet.
- An email is a letter that is sent over a computer network instead of being sent through the post.
- You can attach documents and photos to emails, just like you can include a photo or a document with a letter.
- You can also attach computer files, such as programs and spreadsheets.
- Most of the Email are free to use.

Advantages of Email :

1) Comes with productivity tools :

- Email is usually packaged with a calendar, address book, instant messaging, and more for convenience and productivity.

2) It is Fast :

- Most messages are delivered within minutes - sometimes seconds - around the world without the inconvenience.

3) It is personal :

- Email is totally a personal communication between the users.
- The nature of email is informal and its efficiency is an excellent substitute for telephone conversations.

4) You can think through your response :

- Like a letter or post, you can type or reply carefully and make changes before sending it to the recipient.

5) Easy mail management :

- Email service providers have tools that allow you to file, label, prioritize, find group and filter your emails for easy management.

6) The sender and the receiver don't have to be working at the same time :

- It is an asynchronous communication technique.
- Email ~~provides~~ avoids problems such as telephone tag or trying to contact someone in a different time zone.

7) Communication with multiple people :

- You can send an email to multiple people at once, giving you the option to include as many people as you want in a conversation.

8) Accessible anywhere at any time :

- You don't have to be at home to get your mail.
- You can access it from any computer or mobile device that has an internet connection.

Email service providers:

- Email is the most common mode of communication in today's modern world, whether for business or personal use.
- There are a number of email service providers on the internet, each with their own set of features.
- The majority of email service providers provide their services for free, although some premium features may be charged.
- The list and features of various email service providers are given following:

- 1) Gmail (Google Mail)
- 2) Outlook (Microsoft Hotmail)
- 3) Yahoo! Mail
- 4) iCloud Mail
- 5) Rediff Mail

1) Gmail:

- Gmail is a Google-provided email service.
- It can be accessed over the web or by third-party programmed.
- It is available on Microsoft Windows, MacOS, iOS, Android phones and tablets.
- Gmail gives you 15 GB of free storage and it allows you to send up to 25 MB of data via Email.
- Files greater than 25 MB can also be shared through Google Drive.
- Gmail is used for both personal and corporate purposes.

Pros:

- i) It may be accessed from any computer or mobile device.
- ii) Undo sent Emails.
- iii) It offers snooze feature which allows you to set a snooze time for a specific email.
- iv) The ability to forward emails.
- v) Provides powerful search service.
- vi) Two-step verification ensures security.
- vii) It allows you to join hangouts Meet chat or video call with others from your inbox.
- viii) Gmail blocks phishing Emails automatically.
- ix) Many keyboard shortcuts are supported.
- x) It can also be used in offline mode.

Cons:

- i) Sometimes, it gets slow in loading.
- ii) Managing different folders and labels is a little bit confusing.

Email address format: example @gmail.com, abc@googlEmail.com, abc+xyz@gmail.com, abc.xyz.Pqr@gmail.com etc.

2) iCloud Mail :

- iCloud Mail is an email service operated by Apple and best used for data encryption and Mac users.
- It was launched in 2011.
- It provides good cloud storage capacity and file sharing capability.
- It is easy to set up and unsubscribe email.
- This cloud app automatically turns on several apps like iCloud Drive, Photos, iCloud Backup, and so on once the account is set up.

Pros:

- i) There are no advertisements in iCloud Mail, a user can compose emails easily.
- ii) It provides cloud storage for documents, photos and music.
- iii) It allows you to download these files on iOS, Mac and Windows devices.
- iv) Clean, minimalist interface.
- v) It allows you to share files up to 5 GB.
- vi) Free online storage of 5 GB.
- vii) Keyboard shortcuts are supported.
- viii) You can share and store your files and folders via iCloud drive.

Cons:

- It can be used only with Apple devices

Email address Format : example@icloud.com