LAN (Local Area Network): LAN is a network that typically covers a small geographical area, like a home, office, or a building. It connects devices like computers, printers, and servers, allowing them to communicate and share resources.

WAN (Wide Area Network): WAN spans a larger geographical area and connects multiple LANs together. The internet is the most extensive WAN, connecting devices across the globe.

OSI Model (Open Systems Interconnection): The OSI model is a conceptual framework defining the functions of a telecommunication or computing system. It consists of seven layers, each responsible for specific tasks in enabling communication between devices. These layers are:

- Physical
- Data Link
- Network
- Transport
- Session
- Presentation
- Application

TCP/IP Model (Transmission Control Protocol/Internet Protocol): It's a concise version of the OSI model and is the basis of the modern internet. It consists of four layers:

- Application

- Transport
- Internet
- Link

Both models help in understanding how data travels across a network, from the application level down to the physical transmission of bits.

INTERNET

The internet is a global network of interconnected computers and devices that communicate via standardized protocols. It allows for the exchange of information, data, and communication across the world.

Applications of the Internet:

- **Communication:** Email, instant messaging, video conferencing.
- **Information Retrieval:** Search engines, online databases, wikis.
- **Entertainment:** Streaming services, online gaming, social media.
- **E-commerce:** Online shopping, banking, digital payments.
- **Education:** Online courses, research materials, e-libraries.
- **Business:** Remote work, cloud computing, online collaboration tools.

Connecting to the Internet:

- **ISP (Internet Service Provider):** You typically connect to the internet

through an ISP, which could be a cable company, telephone company, or other providers. They offer various connection types like DSL, cable, fiber, or mobile data.

- **Modem/Router:** A modem translates data from your network into a form suitable for transmission over the internet. A router manages network traffic between devices in your home or office and the internet.

- **Device Connectivity:** Computers, smartphones, tablets, and other devices connect to the internet using Wi-Fi, Ethernet cables, or cellular networks.

Connecting to the internet involves obtaining a subscription from an ISP, having the necessary equipment like a modem and router, and configuring your

devices to access the network.

ISP

An ISP (Internet Service Provider) is a company or organization that provides access to the internet. ISPs offer various services and technologies to connect individuals and businesses to the global network. They act as the bridge between users and the internet, facilitating the transfer of data across their networks.

World Wide Web

The World Wide Web (WWW or Web) is an information system on the internet that allows documents to be connected via hyperlinks, enabling users to access and navigate between them using web browsers.

Web Browsing Software: These are applications used to access and view websites on the internet. Some popular web browsers include:

Google Chrome: Known for its speed, simplicity, and extensive extension ecosystem.

Microsoft Edge: Developed by Microsoft, it's known for its integration with Windows systems.

Search Engines: These are tools that help users find specific information on the internet by entering keywords or queries. Some widely used search engines are:

- **Google:** The most popular search engine globally, known for its vast

URL (Uniform Resource Locator): It's the address used to identify resources on the internet. A URL consists of several parts:

- **Protocol:** Specifies how a browser should retrieve information. For example, "https://" or "http://".
- **Domain Name:** The human-readable name of the website, like "google.com" or "wikipedia.org".
- **Path:** Specifies the location of a specific resource on the server, like "/about" or "/blog/post1".
- **Parameters:** Additional information passed to the web server, usually seen after a "?" in the URL.

Domain Name: It's a unique name that identifies a website. For example, in

"google.com," "google" is the name, and ".com" is the top-level domain (TLD). Domain names are easier to remember than IP addresses.

IP Address (Internet Protocol Address): It's a numerical label assigned to each device connected to a computer network using the Internet Protocol for communication. IP addresses identify devices on a network, enabling data routing.

Using an e-Governance website involves accessing government services online. You'd typically:

- **Visit the website:** Enter the URL of the e-Governance portal in your browser.
- **Navigation:** Browse through the website to find the specific service you require.

- **Login/Register:** Some services might require user authentication or registration.

- **Select Service:** Choose the service you need (e.g., tax filing, applying for documents).

- **Follow Instructions:** Provide necessary information, fill forms, upload documents as instructed.

- **Submit/Verify:** Submit the form or verify the details entered.

- **Confirmation:** You might receive a confirmation or transaction ID for future reference.

Instant Messaging: Instant messaging (IM) refers to real-time communication over the internet, allowing users to

exchange text, multimedia messages, or files instantly. Some popular instant messaging platforms include WhatsApp, Facebook

Netiquette (Network Etiquette): It's a set of guidelines and rules for appropriate behavior when communicating online.