**Network Terminology:-**

* IP address
* Firewall
* Router
* DNS
* Switch
* MAC Address
* VPN

**IP address :**

An Internet Protocol (IP) address is the unique identifying number assigned to every device connected to the internet.

Example: IPv4 address like 192.168.1.1 or IPv6 address like 2001:0db8:85a3:0000:0000:8a2e:0370:7334.

**Switch:**

A network device that connects devices together on a local area network (LAN) and uses MAC addresses to forward data to the correct destination.

Example: An Ethernet switch connecting multiple computers in an office.

**Firewall:**

A network security system that monitors and controls incoming and outgoing network traffic based on predetermined security rules.

Example: A corporate firewall that blocks access to certain websites.

**DNS:**

A hierarchical system for naming resources on the Internet(Domain Name System). It translates human-readable domain names to IP addresses.

Example: Translating the domain name www.example.com to the IP address 93.184.216.34.

**Bandwidth:**

The maximum rate of data transfer across a given path. Bandwidth is measured in bits per second .

Example: A high-speed internet connection with a bandwidth of 100 Mbps.

**Router:**

A router is a device that connects two or more packet-switched networks or subnetworks.Routers allow devices to connect and share data over the Internet or an intranet. A router is a gateway that passes data between one or more local area networks

Example: when a user sends a request for a server, the router on the local network will examine its routing table and decide where to relay the data.

**MAC Address:**

A hardware identification number that uniquely identifies each device on a network.

Example: 00:1A:2B:3C:4D:5E.

**VPN :**

Definition: A service that allows you to connect to the internet via an encrypted tunnel to ensure your online privacy and protect your sensitive data.

Example: Using a VPN service to securely connect to your company’s network while working remotely.