Lab Experiment-1

1) Hub

Hub is a basic networking device that is used to connect multiple devices together.

It acts as a central system which helps in communication and enables to send and receive data.

The hub collects all the data and broadcast it to other devices which are connected to hub.

Hubs are not much efficient & does not have security protocols to secure the data flows.

2) Switch

Switch is a networking device that is used to connect multiple devices with LAN.

It sends data only to a specific device. Some types of switches are:-

Edge switches - These switches handle traffic entering and departing the network these connect PC's and access points

Core switches - These switches are backbone of network. These connect the edge and aggregation network to Organisational LAN's router.

3) **Router**

A router is a networking device that connects multiple networks together and also handles traffic between them. Routers determine the shortest path to transfer data. Router provide the security protocols like firewalls etc.

4) **Gateway**

A gateway is a entry and exist point for a data packet. It translates between different protocols. It generally a combination of a router and a modem.

5) **Modem**

A Modem stands for modulator demodulator. It modulates & demodulates signals to allow communication. Modem converts digital signals for transmission over cables etc

6) **Repeater**

Repeater is used to amplify the network. It retransmits the network to more extent to travel more. Take the network, amplifies it & send it forward.

7) NIC (Network Interface Card)

It is a network adapter that is used to connect the computer to the network.

It is installed in the computer to establish a LAN.

It acts as a interface b/w the computer and router or modem.