**Netowk:** Network is a combination of multiple computer together for sharing the data,resources between them

**Router:** Router is networking device used to connect networks and connect multiple devices on a other network. It supports some functions,

1.Path determination: Router determines the best path for travel of data from source to destination and it does analyzing metrics like speed,capacity and delay

2.Traffic management: Router allows forwarding of data packets to an intended ip addresses and manage the traffic between networks.

3.Multiple device connection: Router can connect multiple devices to use same internet connection.

**Switch:** Switch is computer network hardware device used to connect muliple devices on a network and forward data packets between them.

\*switch act as traffic cops at an intersection, analyze the data packets, forward data to correct destination and switch can adjust their forwarding packet decisions based on their network conditions and switch can block or limit the traffic's on ports that receive too much of data

\*switch can be used to connect lan's and wan's

\*switch used to share the information and provide a communication between devices

\* switch can support the multicasting

**LAN(Local Area Network):**

1.The group of computers and devices together connected by a swicth and stack of switches.

2.Lan's can covers smaller geographical area that is 2KM's

3.Lan can be established in school,college and offices

4.Communication medium used in lan is twisted pair and coaxial cables

5.Lan can be data speed range from 100 Mbps

**MAN(Metroplitan Area Network):**

1.Man is a group of multiple lans together

2.Man can cover larger geographical area that is near to 5-50KM's

3.Man can be used in city or country

4.The devices used in man to transfer the data through modem and cable/wire

5.The speed range of man is slow compared to lan and data speed in terms of Mbps

**WAN(Wide Area Network):**

1.Wan is a computer network that extends a large geographical area

2.Wan can cover the range of area is above 50KM

3.The speed range of wan is Kbps to Mbps

4.A communication meduim used for wan is Satellite link