**Internet:** A global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communication protocols.

**Protocols:** **Network protocols** are formal standards and policies comprised of rules, procedures and formats that define communication between two or more devices over a **network**. **Network protocols** govern the end-to-end processes of timely, secure and managed data or **network** communication.

**Guided Media**: **Guided media**, which are those that provide a conduit from one device to another, include twisted-pair cable, coaxial cable, and fiber-optic cable. **Guided** Transmission **Media** uses a "cabling" system that guides the data signals along a specific path. The data signals are bound by the "cabling" system.

**Unguided Media**: **Unguided media** relates to data transmission through the air and is commonly referred to as wireless. The transmission and reception of data is carried out using antenna. There are two main ways that antenna work: Directional (in a beam)

The key **difference** between **guided** and **unguided media** is that **guided media** uses a physical path or conductor to transmit the signals whereas, the **unguided media** broadcast the signal through the air. ... However, the **unguided media** is also called wireless communication or unbounded transmission **media**

**Coaxial cable:** Coaxial cable, or coax, is a type of electrical cable that has an inner conductor surrounded by a tubular insulating layer, surrounded by a tubular conducting shield. Many coaxial cables also have an insulating outer sheath or jacket.

**Switching**: A **network switch** (also called **switching** hub, bridging hub, officially MAC bridge) is a computer **networking** device that connects devices together on a computer **network** by using packet **switching** to receive, process, and forward data to the destination device.

**Throughput:** Network **throughput** refers to the average data rate of successful data or message delivery over a specific communications link. Network **throughput** is measured in bits per second (bps). ... Maximum network **throughput** equals the TCP window size divided by the round-trip time of communications data packets. **network throughput** is the amount of data moved successfully from one place to another in a given time period

Four sources of nodal delay:

1. Nodal delay; 2. Queueing delay; 3. Propagation delay; 4. Transmission delay;

Nodal delay: Processing **delay** as "The time it takes to process a packet in a network node (router, switch, hub, etc.), which is dependent on the speed of the device and congestion in the network. Contrast with propagation **delay**".