

1. *What is **gateway**?*

A gateway is a network point (a computer or router) that acts as an entrance to another network. It allows users to connect from one network to another.

2. *What is **bandwidth**?*

Bandwidth is the amount of information or data that can be sent over a network connection in a given period of time.

3. *If 100mb of data can be downloaded in 10 seconds, what is the connection speed?*

$$\text{Connection Speed} = \frac{\text{amount of data}}{\text{time to download}} = \frac{100\text{mb}}{10\text{seconds}} = 10\text{mbps}.$$

4. *Which of the following components effect your connection speed?*

Communication Channel, Modem, ISP.

5. *Data transmission types?*

Data can be transmitted by two types of signals, Analog and Digital signals.

6. *What is a **modem**? What does it do?*

A **modem** is an electronic device that converts computer data into audio signals (**m**odulation) and audio signals back into computer data (**d**emodulation).

7. *How does a **firewall** work?*

Like an actual firewall built to prevent fire from spreading between adjoining buildings, computer firewalls prevent the spread of unauthorized communication between an individual computer or group of networked computers and the Internet.

8. *What is a **spyware**?*

Spyware is software that aims to gather information about a person or organization without their knowledge.