

Course Name : O Level(B3-1st sem.)

Subject : ITT&NB

Topic : Modes of connecting  
Internet part-2

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## Modes of connecting Internet

### Dial-Up

Dial-up connections needs users to connect their phone line to a computer to access the Internet. This type of connection (also known as analog) does not permit users to make or receive phone calls through their home phone service while using the Internet.

### DSL

The full form of DSL is **Digital Subscriber Line**. It uses existing 2-wire copper telephone line connected to one's home so service is delivered at the same time as landline telephone service. In this type of connection, **customers can still place calls while surfing the Internet**.

### ISDN

The full form of **ISDN** is **Integrated Services Digital Network** which allows users to send data, voice and also video content over digital telephone lines or standard telephone wires. In this type of connection, the installation of an **ISDN adapter** is required at both ends of the transmission (**on the part of the user as well as the Internet access provider**).

### Cable

Cable Internet connection is a form of broadband access. Through use of a cable modem, users can access the Internet over cable TV lines. Cable modems can provide extremely fast access to the Internet.

### Satellite

In certain areas where broadband connection is not yet offered, a satellite Internet option may be available. Similar to wireless access, satellite connection utilizes a modem.

### Broadband

Broadband Internet connection is provided through either cable or telephone companies. Broadband Internet uses multiple data channels to send large quantities of information. The term broadband is shorthand for broad bandwidth. Broadband Internet connections such as DSL and cable are considered high-bandwidth connections.

**Note:** Although many DSL connections can be considered broadband, but not all broadband connections are DSL.

## **Leased line**

A leased line is a dedicated, fixed-bandwidth, symmetric data connection. Symmetric means uploading and downloading data at the same fast speed. A leased line is a dedicated communication channel that interconnects two or more sites. This is a service contract between a customer and a provider. It acts as a dedicated tunnel from one point to the other where data can continuously flow for a fixed monthly fee or rent. Leased lines are used for Internet and even telephone services. They are typically run on fiber optic cables to provide large bandwidth and speed.

### **Example:**

Businesses required constant connectivity to communicate and transact over the internet, because shared internet lines along with multiple users accessing simultaneously, can lead to inefficiencies. Leased Line service for enterprises, empowers them with dedicated bandwidth to ensure reliable high-speed communication.

## **USB Tethering**

Tethering is the sharing of mobile device's Internet connection with other connected computers. We can share our phone's mobile data with other devices like our Laptop through tethering. It makes our Laptop be able to connect to the Internet when there is no network connection.

**There are three types of tethering: USB tethering, Wi-Fi tethering, Bluetooth tethering.**

USB tethering has the fastest speed among the three ones. It requires a USB cable to connect our Laptop with our phone.

### **Exercise:**

1, Define Broadband, Leased line and USB Tethering Internet connection.