

## ASSIGNMENT -1

### Wifi and Bluetooth

#### 1. Wifi -Wi-Fi means "Wireless Fidelity"

**Meaning:-Wi-Fi is a wireless networking technology that allows devices such as computers (laptops and desktops), mobile devices (smart phones and wearables), and other equipment (printers and video cameras) to interface with the Internet. It allows these devices--and many more--to exchange information with one another, creating a networks.**

- **How does wifi works:-**

A Wifi hotspot is created by installing an access point to an internet connection.

An access point acts as a base stations.

When wifi enabled device encounters a hotspot ,the device can then connect to that network wirelessly.

A single access point can support up to 30 users and can function within a range of 100-150 feet indoors and upto 300 feet outdoors.

- **Advantages:-**

1. Comfortness
2. Flexible
- 3.Expendability

- **Disadvantages:-**

- 1.Speed
- 2.Realibility
- 3.security

#### 2.**BLUETOOTH:**

**Meaning :-A Bluetooth is a telecommunications industry specification that describes how mobile devices ,computers and other devices can easily communicated with each other using a short-range wireless connection.**

- **How does Bluetooth works:-**

A Bluetooth device works by using radio waves instead of wires or cables to connect with your cell phones,smartphones or computer.

Bluetooth is a wireless short-range communications technology standard found in millions of products we use every day including headsets,smartphones,laptops and portable speakers.

- **Advantages:-**

1. Bluetooth devices are wireless.
2. Inexpensive
3. Low energy consumption.
4. provides range up to 100 meters.

- **Disadvantages:-**

- 1.Low bandwidth
- 2.Cannot work in a long distance environment
- 3.Battery use increased in devices

#### **DIFFERENCE:**

**Wifi**

**Bluetooth**

Bandwidth :- High

Range :- 100 meters

Power Consumption-medium

security:-highly secure

primary devices:-Notebook computers,desktop  
computer,servers

low

10 meters

low

less secure

Mobile phones,mouse ,  
keyboard and offices.