**Corse . Computer application. Program BS MLT 4th**

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**I’d 14922 Assignment no 1 Final term**

**Q1**: Different types of transmission media?

**Ans . Guided transmission media.** Are the physical links in which signals are transmitted .In guided transmission media wire is being used .We can also say that it is cable media.

**Three major types of Guided media are .**

1. **Twisted pair cable:** Consist of two insulated copper wires most commonly used wire. In expensive and flexible. Speed of twisted pair cable is from 100kbs to 1000 Mbps.
2. **Coaxial cable:** has central core conductor inclosed in an insulating sheath, which is encased in an outer conductor of metal foil. The outer metallic wrapping is a second conductor to complete the circuit . Difficult to instal. Advantage of coaxial cable is that it is highly resistant to signal interference.
3. **Optical fiber cable.** Consist of very narrow strand (fiber of glass) which core of the wire. The core is surrounded by a concentric layer of glass(cladding) transmit signal in the form of light. Speed is very high. (In Gbs normal)

**B. Unguided transmission media. (**Wireless media).

**In** unguided media signals are transmitted without using any physical conductor between the two devices. In unguided communication media signals are normally broad cast through the air.

**Three main types.**

1. **Radio waves.** Radio waves distributed radio signals through the air over long distance. They may be in cities .or may be in an office.
2. **Micro waves.** Micro waves is a wireless transmission technology that travels at high speed .micro wave transmission requires the sender to be in line of sight. Micro waves is used to transmit data over a few miles.
3. **Infrared .**Infrared is a short distance wireless transmission medium that sends signals. Using infrared light waves. This technology is similar to the use of a remote control for a TV. Signal are sent through light . Which is frequency below visible light .

**Advantages of Guided media.**

* Guided media less expensive.

Work upto long distance. Normally faster. No security issues.

**Disadvantages of Guided media.**

* Guided media more complex.
* Cannot be installed any where.

**Advantages of unguided media.**

* Can be connected any where less expensive

**Disadvantages of unguided media.**

* **L**ow speed less secure.