

### **Which category of twisted pair is mainly used.**

- There are up to 7 categories of twisted pair but Category 3 and 5 twisted pairs are mostly used.
- Category 3 has 2 individually insulated wires twisted together .
- 4 such twisted pairs are put together in a sheath to form the medium.
- Category 5 is same as 3 with more number of twist per cm. More the number of twists the better the communication medium .
- Leads to less cross talk and better signal transmission over longer distances.

### **Which transmission medium works at 2 giga bits per second.**

- The fiber cable sends data at rate of 2 giga bites per second.
- Cable consists of Hair like thin fiber which works on the principle of total internal reflection.
- It transmits data with speed of light and works on bandwidth up to terahertz.
- Transmitting medium is fiber of glass which is insulated on the outside.
- Advantage:Attenuation of signal is minimum.

Speed of transmission is very high.

### **Can infrared be used for transmission**

- The infrared waves can be used for short range communication in networking (up to 45 km).
- It is wireless communication so no physical medium is required to connect the transmitter and receiver .
- Works on line of sight system i.e. the transmitting and receiving antennas should be in the sight of each other.
- No government license is needed till now for this communication .
- Example :used in television ,stereos.