

Assignment - 1

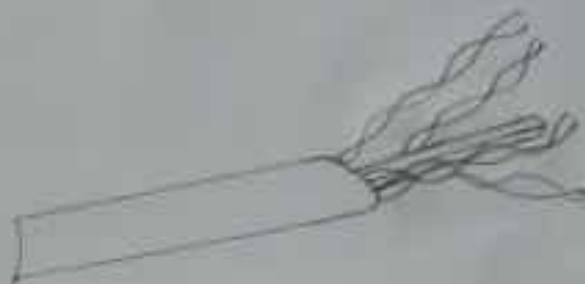
Making of Network Cable

Types of Cable with diagram:- For the purpose of telecommunication, transmission media can be divided into two categories. They are-

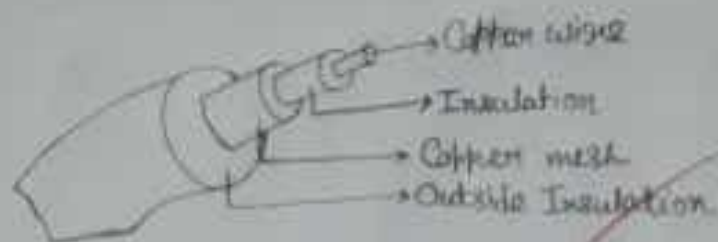
- ① Guided Media
- ② Unguided Media

Guided Media:-

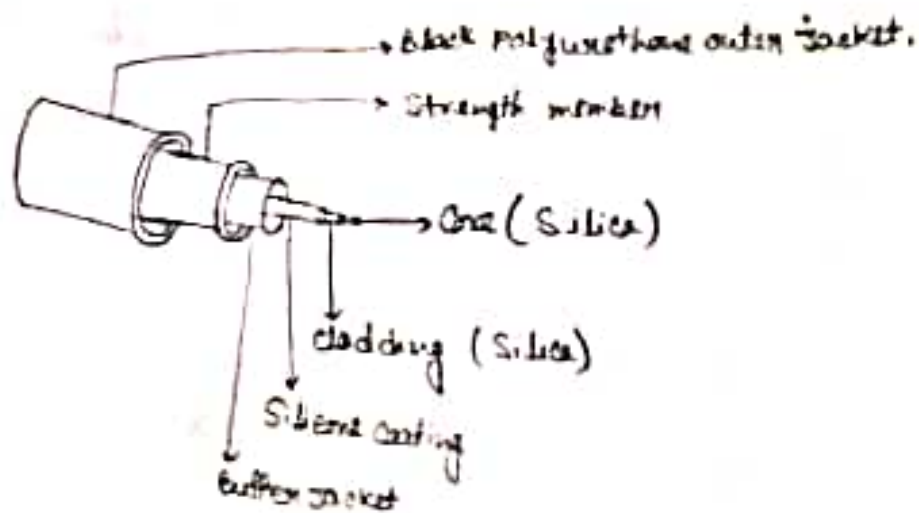
Twisted Pair Cable:-



Co-axial Cable:-



Fiber Optical Cable:-



Unguided Media are of:-

- a) Radio waves
- b) Microwaves
- c) Infrared waves.

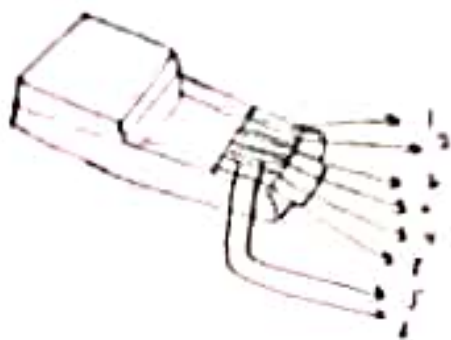
What is Network Cable?

Network cable may be referred to as a cord which contains wires inside a plastic covering and is connected to a modem. This cable is used mainly for the internet connection or LAN (Local Area Network).

The materials we need:- ① A cable (The one we used in the UTP (Unshielded Twisted Pair) Cable):-



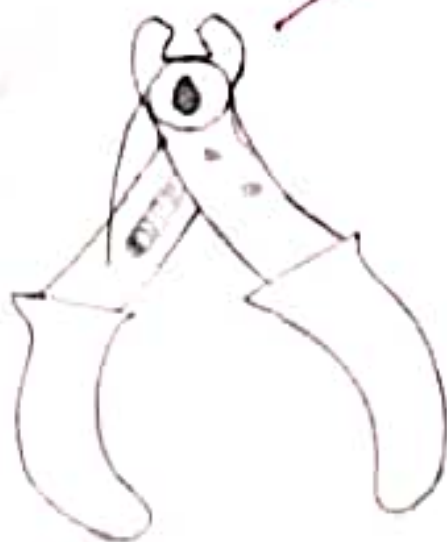
RJ-45 Connector:-



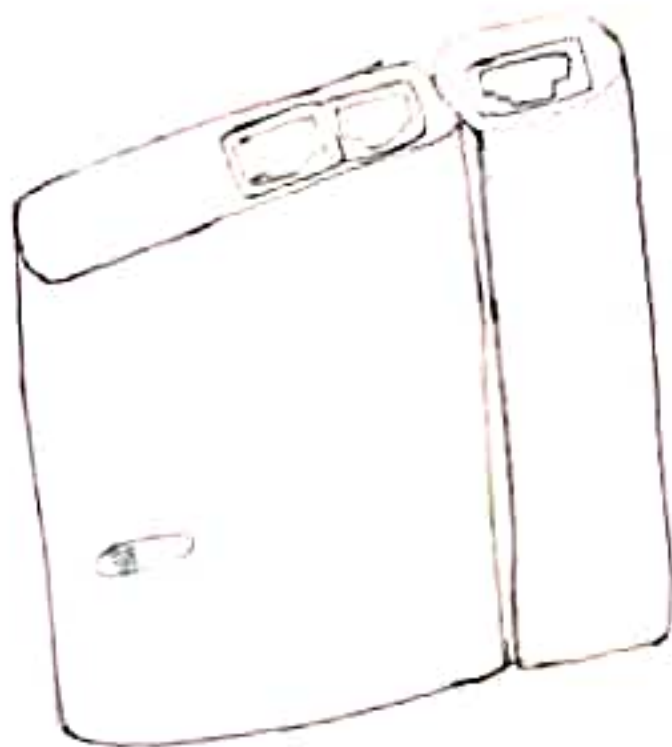
Crimping Tool (to connect the UTP cable to the RJ-45):-



Wire Strippers:-



Cable Tester:-



Now, the Procedure:-

First thing to do is strip the covering of the cable at least half an inch with the use of the wire stripper. Note: Be cautious using a knife or the scissors for it might damage the inner wires.

For the crossover this is the order.

Pin ID	Side A	Side B
1	Orange - white	Green - white
2	Orange	Green
3	Green - white	Orange - white
4	Blue	Brown - white
5	Blue - white	Brown
6	Green	Orange
7	Brown - white	Blue
8	Brown	Blue - white

there are two arrangements which must be applied one in one end and another on the other end. This is only applicable in the cross-over cable.

The straight Through cable is arranged in another order. Just follow what is shown in the image.

After arranging them, you have to connect them into the RJ-45 with the use of the crimping tool. The crimping tool is used to crimp fully the connection. Note! Make sure all the wires are connected perfectly well.

After not yet through, we have to test the cable with the help of the tester.

If passed, the tester will determine. If your network cable is functional.

In the tester there are eight light buttons, when all the buttons all light, surely all the wires are connected well. But if only few lights, it only means that there are wires not completely connected.

Salvy V. 27/1/23