Course Name: O Level (2nd Sem) Subject: ICT

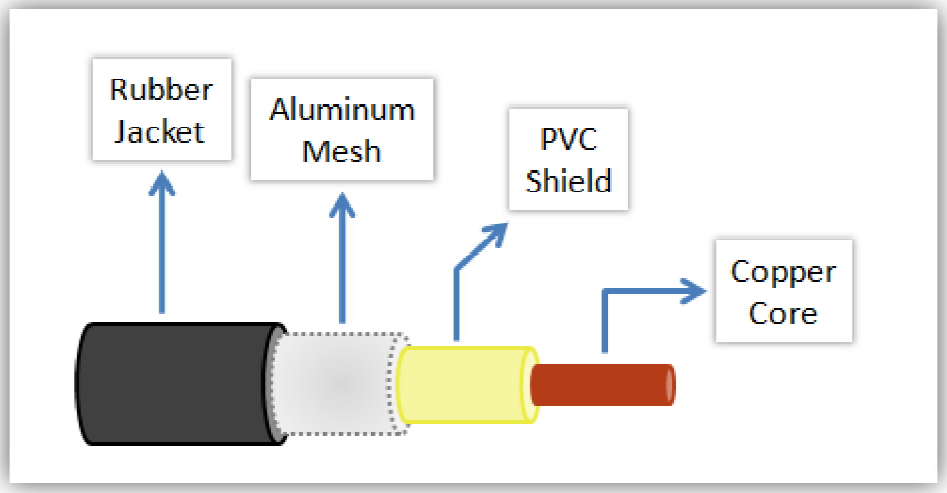
Topic: Transmission Media Contd. Date: 15-05-20

Co-Axial Cable: Co-axial cable is a different kind of cable that uses only one central copper core. All signals travel through that core. Here the outer cover is a jacket inside of which, there is a metallic mesh. Inside of mesh, there is a PVC shield that covers the copper core.

These cables are not much used in LANs. Instead, these cables are used in TV networks. The high bandwidth makes it compatible to be used for heavy video data in TV networks.

These cables are of two types:

- Thicknet (covers 500 meter distance)
- Thinnet (covers 200 meter distance) but 180m mostly.



NOTE: CO-axial cables use BNC connectors. BNC is the group of characters that define the names of its inventors. Buyonet, Neill and Concelman were the inventors of BNC.n

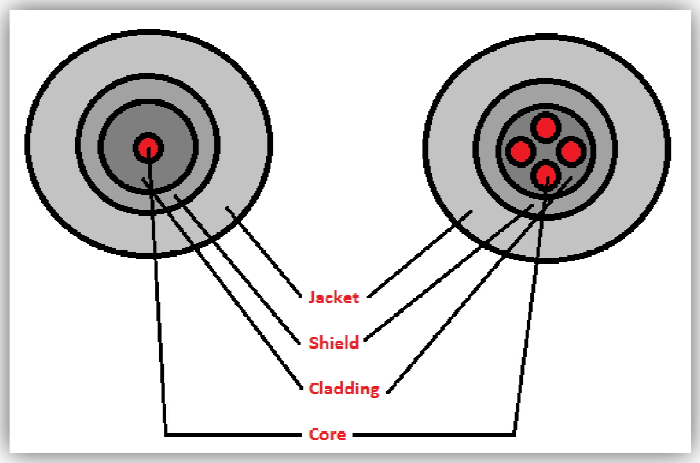
OFC: OFC stands for Optical Fiber Cable. It is a cable with a glass core in it that can pass optical rays through it. The structure of this cable consists of a jacket in which there is a PVC shield. Inside of the shield, there is a layer of cladding. The glass core is packed in this cladding.

OFC is mostly used in long distance communication. For example- Intercity LAN connections, Intercontinental communication using deep sea cabling.

OFCs are of following two types:

1. Single mode OFC
2. Multimode OFC

Single mode OFC is the one that contains just one glass core in the cladding whereas multimode OFC is the one that may have many glass cores inside of one single OFC.



NOTE: OFCs use two very specific connectors namely SC (Secure Connection) and ST (Secure Tip) connectors. These are tailor made.

Assignments:

1. What are the usages of co-axial cables and OFCs?
2. What are key differences between co-axial and OFC cables?