Study of different types of network cables

Aim :- Study different types of network cables

a) understand different types of network cable

Different kinds of cables in networking are:

1) Unshielded Twisted Pain (UTP) cable
2) Shielded Twisted Pain (STP) cable
3) Coaxial Kable
4) Fibre optic cable

Cable Type	Category	Maximum Data Transmission	Advantages/ disadvantages	Application
UTP	Category 3	10bps	Advantages :- *Cheaper in cost * Easy to install as they have a smaller overall diamater	10-base T Ethe
	Category 5	upto 100 mbps		Fast Ethernet &
	Category 5e	1Gbps		
			Disadvantages * More prone to EMI interference and noise	Fast Ethernet
STP	Category 6, 6a	10 hbps	Advantages * Shielded * Faster than UTP * Less susceptible to noise and interference	Gigabit Ethernet 10 G Ethernet Widely honed in data Guild
SSTP	Category 7	10 Gbps	Disadvantages * Expensive * greater installation effort	Gigabit Ethernet 10G - Ethernet (100m)

			Advantages
coaxial cable	RG-6 RG-59 RG-11	10-100 MHz	· High bandwidth · immune to interference · low loss · kerratd
			Disadvantage · Limited sheithn · Cost
fibre optics cable	Single-mode Multimode	100 Gbps	Advantages · High speed · High bandwidth · High Security · long distance
			Disadvantages * Expensive * Requires Skilled

Students Observation:

1) difference b/w Cross cable and Straight Cable?

+) A straight cable connects different de. while cross cable connects similar by swapping transmit and so receive wi

2) Which type of cable is used to connect two pc?

A) Cross cable

3) which cable is used to connect route to pc?

4) Straight cable.

4) Find the category of twisted pair Cables used to connect pc to the network Socket?

A) Category 5e or category 6

5) write down understanding challenges faced and output received?

A . Learnt color Coding and wiring Standard
  . Difficulty in arranging wires in correct order.
       Successfully made working cables that connected devices and enabled proper communication.

Result

       Hence the different type of network Cables have been successfully studied.