

Batch: A3

Experiment Number:2

Roll Number:16010423099

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Aim of the Experiment: Fabrication of LAN cables in Computer Networks

Program/ Steps:

Step 1: Cut into the plastic sheath about 1 inch (2.5 cm) from the end of the cut cable.

Step 2: Unwind and pair the similar colors.

Step 3: A straight cut across the 8 wires to shorten them to 1/2 Inch (1.3 cm) from the cut sleeve to the end of the wires by crimping tool.

Step 4: Crimping the cable- Carefully place the connector into the Ethernet Crimper and cinch down on the handles tightly.

Step 5: Test the cable- Check the continuity of connectors using ping from a computer.

Output/Result:



Post Lab Question-Answers:

1. The slowest transmission speeds are those of

- a. Twisted-pair wire
- b. Coaxial cable
- c. Fibre-optic cable
- d. Microwaves

Answer: A) Twisted pair wire

2. Compare coaxial cable and optical fibre cable.

Answer: Coaxial cable uses electrical signals, offers moderate speed and bandwidth, is more affordable, but is prone to electromagnetic interference. In contrast, optical fiber transmits data via light, providing much higher speeds and bandwidth, immunity to interference, but at a higher cost.

Outcomes:

CO4: Execute their knowledge of computer communication principles, including Error detection and correction, multiplexing, flow control, and error control.

Conclusion (based on the Results and outcomes achieved):

Fabricated a LAN cable by applying knowledge of computer communication principles.

References:

Books/ Journals/ Websites:

- Behrouz A Forouzan, Data Communication and Networking, Tata Mc Graw hill, India, 4th Edition
- A. S. Tanenbaum,” Computer Networks”, 4th edition, Prentice Hall