Bahria University,

Karachi Campus



LAB EXPERIMENT NO.

02

LIST OF TASKS

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| TASK NO | OBJECTIVE |
| 1 | Define following network terminologies: |
| 2 | Make straight and cross Ethernet cable using EIA/TIA 568A and EIA/TIA 568B standard |

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**LAB 02 STRAIGHT AND CROSSOVER ETHERNET CABLE**

1.Define following network terminologies:

1. **EIA/TIA 568A and 568B standards: These are wiring standards used to define the arrangement of color-coded wires within Ethernet cables, ensuring uniformity in network connections.**
2. **Color combination of straight and cross Ethernet cable: Ethernet cables use specific color combinations for their twisted wire pairs. In a straight-through cable, both ends have the same color arrangement, while in a crossover cable, certain wire pairs are crossed to facilitate direct connections between similar devices.**
3. **Unshielded Twisted Pair (UTP) & Shielded Twisted Pair (STP): UTP cables consist of twisted pairs of wires without shielding, while STP cables have additional shielding to reduce electromagnetic interference, making them suitable for more demanding network environments.**
4. **Straight Through and Cross-over Ethernet Cable: A straight-through cable maintains the same wire arrangement on both ends, typically used to connect different types of network devices (e.g., computer to switch), while a cross-over cable swaps specific wires, primarily used for direct connections between similar devices (e.g., computer to computer).**
5. **RJ-45 connector: This is a standardized connector used for Ethernet networking, featuring 8 pins in a modular design, commonly** associated with Cat 5e, Cat 6, or Cat 7 Ethernet cables for wired network connections.

2. Make straight and cross Ethernet cable using EIA/TIA 568A and EIA/TIA 568B standard

