***THE SUPERIOR UNIVERSITY***

**COMPUTER NETWORKINGS**

**SUBMITTED TO**

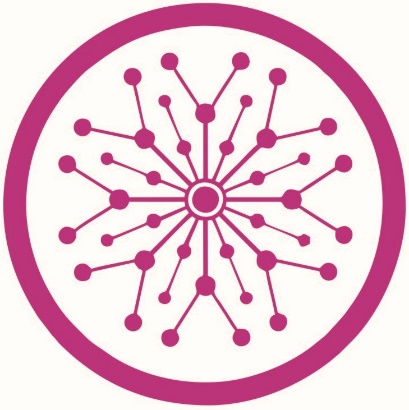
**SIR RASIKH**

**LAB TASK 12**

**SUBMITTED BY**

**NOOR-UL-AIN(172)**

**Section-(5D)**



***GOLD CAMPUS, 7 KM MAIN RAIWIND ROAD LAHORE***

**Difference Between VLAN and Inter-VLAN Routing**

| **Aspect** | **VLAN** | **Inter-VLAN Routing** |
| --- | --- | --- |
| **Definition** | VLAN (Virtual Local Area Network) is a logical grouping of devices within a network. It segments traffic for improved performance and security. | Inter-VLAN Routing is a method that allows communication between devices located in different VLANs. |
| **Purpose** | To isolate traffic and divide a single physical network into logical networks. | To enable communication between VLANs, which by default cannot communicate with each other. |
| **Communication Scope** | Devices in the same VLAN can communicate directly. | Devices in different VLANs require routing to communicate. |
| **Requirement** | Configured on Layer 2 switches to segment networks. | Requires a Layer 3 device, such as a router or Layer 3 switch, for routing between VLANs. |
| **Example** | VLAN 10 (Admin) and VLAN 20 (Sales) are isolated from each other. | Inter-VLAN Routing allows Admin (VLAN 10) to communicate with Sales (VLAN 20). |

**Summary**:

* **VLAN** is used to segment a network.
* **Inter-VLAN Routing** connects those segmented networks to enable communication between them.