Bahria University,

Karachi Campus



LAB EXPERIMENT NO.

\_\_\_13\_\_

LIST OF TASKS

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| --- | --- |
| TASK NO | OBJECTIVE |
| **01** | Discuss routing, neighbors and topology tables. |
| **02** | What is successor and feasible successor |
| **03** | Configure the example network using different IPs for each network and then configure EIGRP on it. Attach all coding and screenshots. |
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Submitted On

27-12-2023

(Date: DD/MM/YY)

**Question 01:** Discuss routing, neighbors and topology tables.

**Solution**:

In networking:

**Routing:** The process of determining the path that network packets should take from the source to the destination.

**Neighbors Table:** Maintains a list of directly connected routers or devices within the same network segment.

**Topology Table:** Contains information about the network's topology, including the status of links and routers, used by routing protocols to make informed decisions.

**Question 02:** What is successor and feasible successor

**Solution**:

In EIGRP (Enhanced Interior Gateway Routing Protocol):

**Successor:** The primary, best route to a destination based on the lowest metric.

**Feasible Successor:** A backup route to the same destination with a metric less than the current best route. Feasible successors are used as backups if the primary route (successor) fails.

**Question 03:**Configure the example network using different IPs for each network and then configure EIGRP on it. Attach all coding and screenshots.

**Solution:**

A diagram of a computer network

Description automatically generated

A screen shot of a computer

Description automatically generated**Router 1 Configuration:**

A screenshot of a computer

Description automatically generated**Router 2 Configuration**

A screenshot of a computer code

Description automatically generated**Router 3 Configuration**

**Ping From PC 1 to PC 2**

A computer screen with white text

Description automatically generated

**Ping From PC 2 to PC 1**

A computer screen with white text

Description automatically generated