**Assignment – 3**

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**Branch:** BE-CSE (LEET) **Section/Group:** 809/A

**Semester:** 4th **Date of Performance:** 02/04/2022

**Subject Name:** Computer Network **Subject Code:** 20CSP-256

**1. Aim/Overview of the practical:**

Enlighten the services provided by network layer to transport layer in detail.

**Theories:**

**Services provided to the transport layer**

The services provided to the transport layer are as follows −

* **Logical Addressing** − Network layer adds header to incoming packet which includes logical address to identify sender and receiver.
* **Routing** − It is the mechanism provided by Network Layer for routing the packets to the final destination in the fastest possible and efficient way.
* **Flow control** − This layer routes the packet to another way, If too many packets are present at the same time preventing bottlenecks and congestion.
* **Breaks Large Packets** − Breaks larger packets into small packets.
* **Connection Oriented service** − It is a network communication mode, where a communication session is established before any useful data can be transferred and where a stream of data is delivered in the same order as it was sent.
* **Connectionless Service** − It is a data transmission method used in packet switching networks by which each data unit is individually addressed and routed based on information carried in each unit, rather than in the setup information of a prearranged, fixed data channel as in connection-oriented communication.
* **DataGram** − A datagram is a basic transfer unit associated with a packet-switched network. The delivery, arrival time and order of arrival need not be guaranteed by the network.
* **A virtual circuit** − It is a means of transporting data over a packet switched computer network in such a way that it appears as though there is a dedicated physical layer link between the source and destination end system of this data.

**Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):**

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| Sr. No. | Parameters | Marks Obtained | Maximum Marks |
| 1. |  |  |  |
| 2. |  |  |  |
| 3. |  |  |  |
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