**ASSIGNMENT**

**Computer Communication & Networks**

**Submitted to Sir Asfand Yar**

**DATE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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**Definition**

**OSI Model: Open System Interconnection.**

OSI reference model as a framework for defining standards for connecting computers.

**There are 7 Layers Bottom to top**

**PDU**

7: Application Layer 🡪 Data

6: Presentation Layer 🡪 Data

5: Session Layer 🡪 Data

4: Transport Layer 🡪 Segments

3: Network layer 🡪 Packet

2: Data Link Layer 🡪 Frames

1: Physical Layer 🡪 Bits 010101

**7:- Application Layer:** The application layer is the OSI layer closet to the end user.

**Email:-**  Mozilla Thunderbird, Google mail etc…

**Browsers:-**  Internet Explore , Google Chrome etc…

**6:- Presentation Layer:**  It takes data from application layer and marks it with formatting code such as

* Text File: .doc, .xls , .pptx , .html
* Picture file: jpg, png, gif
* Media File: mp4, mp3, 3gp

**5:- Session Layer:** Session Layer deals with connections. It establishes, manages and terminates session between two communicating nodes.

**4:- Transport Layer:** it sets up and maintains the connection between two devices.

End to End Communication

* Segmentation
* Flow control
* Reliable and Unreliable Data

**3:- Network Layer:** Network layer is responsible for providing logical address known as.

* IP address: 39.250.100.199
* Routing Protocol: OSPF 89 , EIGRP 88
* Routed Protocol: IP (v4/v6) , ICMP (v4/v6)

**2:- Data Link Layer:** Data link layer defines the protocol for physical type of link as like,

* LAN , WLAN (wi-Fi)
* LLC: Logical link control
* MAC: Media Access Control

**1:- Physical Layer:**  All devices without any operating system are studied in Physical layer.

* Fiber optic
* UTP/STP cables
* RJ-45
* RJ-11
* RS-232