COMPUTER NETWORKS

MID PAPER

SHORT QUESTIONS

1. Differences between OSI,TCP,IP?

Ans:- OSI:-The Open Systems Interconnection (OSI) model is a conceptual model that divides network communication into seven layers. It's also known as the OSI reference model.

TCP:- Transmission Control Protocol (TCP) is a standard that allows devices to exchange data over a network.

IP:- In a computer network, IP stands for Internet Protocol, which is a set of rules that govern how data is sent between devices on the internet. IP addresses are unique identifiers that are assigned to every device connected to the internet.

Parameters	OSI Model	TCP/IP Model
Full Form	OSI stands for Open Systems Interconnection	TCP/IP stands for Transmission Control Protocol/Internet Protocol
Layers	It has 7 layers	It has 4 layers
Usage	It is low in usage	It is mostly used
Approach	It is vertically approached	It is horizontally approached
Delivery	Delivery of the package is guaranteed in OSI Model	Delivery of the package is not guaranteed in TCP/IP Model
Replacement	Replacement of tools and changes can easily be done in this model	Replacing the tools is not easy as it is in OSI Model

2. What is sliding window protocol?

Ans:- The Sliding Window Protocol is a key computer networking technique for controlling the flow of data between two devices. It guarantees that data is sent consistently and effectively, allowing many packets to be sent before requiring an acknowledgment for the first, maximizing the use of available bandwidth.

Advantages of Sliding Window Protocol

- **Efficiency**
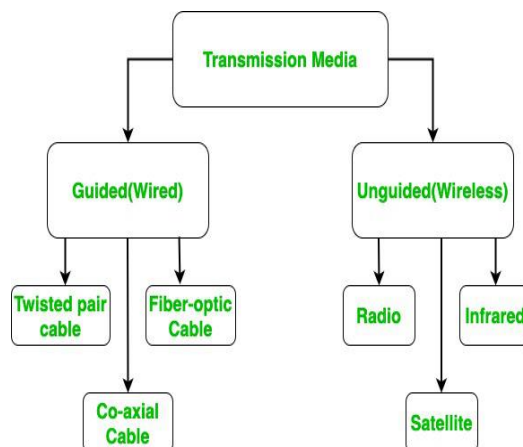
- **Reliable**

- **Flexibility**

- **Congestion Control.**

Disadvantages of Sliding Window Protocol

- **Complexity**

- **Delay**

- **Limited Bandwidth Utilization**

- **Window Size Limitations**
3. **Write about guided and unguided media?**

Ans:- Guided Media:- Guided or Wired media allows signal energy enclosed and guided within a physical medium. This media is used either for point-to-point links or a shared link with various connections.

 Unguided Media:- In the unguided media, the signal energy propagates through a wireless medium. Wireless media is used for radio broadcasting in all directions. Microwave links are chosen for long-distance broadcasting transmission unguided media.

4.What is multiple access protocol?

Ans:- Multiple Access Protocols are methods used in computer networks to control how data is transmitted when multiple devices are trying to communicate over the same network.