**SCT212-0706/2022**

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**NETWORK SYSTEMS ASSIGNMENT**

in 300 words, write a write-up on the difference btw the 7-layer osi reference model and the TCP/IP model

The OSI (Open Systems Interconnection) and TCP/IP models are like blueprints for how computer networks work. They help us understand and build networks, but they do it in slightly different ways.

**OSI Model**:

The OSI model has seven layers. It's like a seven-story building, and each floor has its job.

1. The bottom layer is the "Physical" layer, dealing with actual wires and cables.

2. Above that is the "Data Link" layer, which manages how data is sent over those wires.

3. The "Network" layer figures out how to get data from one place to another.

4. The "Transport" layer makes sure data arrives correctly and in the right order.

5. The "Session" layer sets up, maintains, and ends communication sessions.

6. The "Presentation" layer deals with how data looks and is formatted.

7. The top layer is the "Application" layer where you interact with the network.

**TCP/IP Model:**

The TCP/IP model is simpler. It's like a four-story building.

1. The bottom layer is "Link," dealing with the actual wires and connections.

2. Above that is the "Internet" layer, which handles data routing.

3. The "Transport" layer ensures data arrives correctly.

4. The top layer is the "Application" layer where you use the network.

TCP/IP is the one used most often because it's straightforward and effective. But if you're studying networks deeply, you might use the OSI model as it's more detailed, like a theoretical textbook. It's like choosing between a simple guide and a comprehensive textbook based on your needs.