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 UID –
 BRANCH – B.TECH CSE
 SEM – 4TH
 SEC- 615 “B”
 SUBJECT – COMPUTER NETWORK

Q - Elaborate minimum ten points that differentiate between TCP/IP and OSI model.

OSI Model	TCP/IP Model
It is developed by ISO (International Standard Organization)	It is developed by ARPANET (Advanced Research Project Agency Network).
OSI model provides a clear distinction between interfaces, services, and protocols.	TCP/IP doesn't have any clear distinguishing points between services, interfaces, and protocols.
OSI refers to Open Systems Interconnection.	TCP refers to Transmission Control Protocol.
OSI uses the network layer to define routing standards and protocols.	TCP/IP uses only the Internet layer.
OSI follows a vertical approach.	TCP/IP follows a horizontal approach.
OSI layers have seven layers.	TCP/IP has four layers.
In the OSI model, the transport layer is only connection-oriented.	A layer of the TCP/IP model is both connection-oriented and connectionless.
In the OSI model, the data link layer and physical are separate layers.	In TCP, physical and data link are both combined as a single host-to-network layer.
Session and presentation layers are a part of the OSI model.	There is no session and presentation layer in the TCP model.
It is defined after the advent of the Internet.	It is defined before the advent of the internet.
The minimum size of the OSI header is 5 bytes.	The minimum header size is 20 bytes.

1. OSI has 7 layers whereas TCP/IP has 4 layers.
2. The OSI Model is a logical and conceptual model that defines network communication used by systems open to interconnection and communication

with other systems. On the other hand, TCP/IP helps you to determine how a specific computer should be connected to the internet and how you can be transmitted between them.

3. OSI header is 5 bytes whereas TCP/IP header size is 20 bytes.
4. OSI refers to Open Systems Interconnection whereas TCP/IP refers to Transmission Control Protocol.
5. OSI follows a vertical approach whereas TCP/IP follows a horizontal approach.
6. OSI model, the transport layer, is only connection-oriented whereas the TCP/IP model is both connection-oriented and connectionless.
7. OSI model is developed by ISO (International Standard Organization), whereas TCP Model is developed by ARPANET (Advanced Research Project Agency Network).
8. OSI model helps you to standardize router, switch, motherboard, and other hardware whereas TCP/IP helps you to establish a connection between different types of computers.