**ASSG 1; NETWORK SYSTEMS AND ADMINISTRATIONS**

**Reg No: SCT 212-0193/2022**

DIFFERENCE BETWEEN THE 7 LAYER OSI REFERENCE MODEL AND THE TCP/IP MODEL.

| **OSI** | **TCP/IP** |
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| OSI represents **Open System Interconnection**. | TCP/IP model represents the Transmission Control Protocol / Internet Protocol. |
| It is a generic, protocol independent standard. It is acting as an interaction gateway between the network and the final-user. | Depends on standard protocols about which the computer network has created. It is a connection protocol that assigns the network of hosts over the internet. |
| The OSI model was developed first, and then protocols were created to fit the network architecture’s needs. | The protocols were created first and then the TCP/IP model was built. |
| It provides quality services. | It does not provide quality services. |
| Represents defined administration, interfaces and conventions. It describes clearly which layer provides services. | It does not mention the services, interfaces, and protocols. |
| The protocols of the OSI model are better unseen and can be returned with another appropriate protocol quickly. | The TCP/IP model protocols are not hidden, and we cannot fit a new protocol stack in it. |
| It is difficult as distinguished to TCP/IP. | It is simpler than OSI. |
| It provides both connection and connectionless oriented transmission in the network layer; however, only connection-oriented transmission in the transport layer. | It provides connectionless transmission in the network layer and supports connection and connectionless-oriented transmission in the transport layer. |
| It uses a vertical approach. | It uses a horizontal approach. |
| The smallest size of the OSI header is 5 bytes. | The smallest size of the TCP/IP header is 20 bytes. |
| Protocols are unknown in the OSI model and are returned while the technology modifies. | In TCP/IP, returning protocol is not difficult. |