Application Layer:

At the top of the OSI model is the application layer. Users interact with each other through this layer. The user receives services from it.

The application layer of the internet protocol suite includes interface techniques and communication protocols that are used to process communications over networks. Several protocols are included at the application layer, including Telnet, FTP, TFTP, SMTP, SNMP, DNS, and DHCP.

Telnet stands for the TEL etype NETwork. In terminal emulation, it is helpful. It enables Telnet clients to access the Telnet server's resources. On the internet, it is utilised for file management. Devices like switches are first set up using it. The telnet command is a command that uses the Telnet protocol to communicate with a remote device or system. Port number of telnet is 23.

FTP:

File transmission protocol is referred to as FTP. The protocol is what allows us to transfer files. Any two machines using it can facilitate this. FTP, however, is both a programme and a protocol. FTP encourages file sharing between distant computers through dependable and effective data transfer. For FTP, the data port is 20 and the control port is 21.

TFTP:

The Trivial File Transfer Protocol (TFTP) is a simplified, stock version of FTP, but if you know exactly what you're looking for and where to find it, it's the protocol of choice. It is a streamlined form of FTP and a mechanism for moving files across network devices. TFTP uses port number 69.

NFS

Network file system is referred to as NFS. It enables distant hosts to mount file systems over a network and use them just like they were locally mounted. System administrators can do this to concentrate resources onto centralised network servers. NFS's port number is 2049.

 SMTP:

Simple Mail Transfer Protocol is known as SMTP. A component of the TCP/IP protocol, it. SMTP transfers your email on and across networks by use of a procedure known as "save and forward." To get your communication to the appropriate computer and email inbox, it closely collaborates with a component known as the Mail Transfer Agent (MTA). The SMTP port number is 25, and it.

LDP

LDP It is made to share printers. It is the component responsible for receiving and handling requests. An agent or server is a "daemon." LPD's port number is 515.

X window:

It establishes a protocol for creating client/server programmes with graphical user interfaces. The goal is to enable a client—a program—to run on a single computer. It is mainly utilised in mainframe networks that are linked together. For each server, the X window's port number rises by 1, starting at 6000.

SNMP

Simple Network Management Protocol is known as SNMP. It collects data by requesting specific information from network devices by polling them from a control station at predetermined or arbitrary intervals. It serves as a route for administrators to change pre-defined values as well as a means by which servers can exchange information about their existing states. The SNMP port numbers are 161 (TCP) and 162. (UDP).

DNS

Domain Name System is known as DNS. Therefore, a DNS server must convert each time a domain name is used into the corresponding IP address. The translation of www.abc.com, for instance, could be 198.105.232.4. 53 is the port number for DNS.

DHCP

Dynamic Host Configuration Protocol is what it's called (DHCP). It provides hosts with IP addresses. When a computer requests an IP address from a DHCP server, the server can offer the host a wealth of information. DHCP uses ports 67 and 68.