Eusl/tc/is/2016/com/02

**Assignment**

1. DHCP Server :-

A**DHCP Server** is a network server that automatically provides and assigns IP addresses, default gateways and other network parameters to client devices. It relies on the standard protocol known as Dynamic Host Configuration Protocol or DHCP to respond to broadcast queries by clients.

A DHCP server automatically sends the required network parameters for clients to properly communicate on the network. Without it, the network administrator has to manually set up every client that joins the network, which can be cumbersome, especially in large networks. DHCP servers usually assign each client with a unique dynamic IP address, which changes when the client’s lease for that IP address has expired.

1. Web Server :-

A web server is a computer that runs websites also it’s a computer program that distributes web pages as they are requisitioned. The basic objective of the web server is to store, process and deliver web pages to the users. This intercommunication is done using Hypertext Transfer Protocol (HTTP).

1. Proxy Server:-

A proxy server is any machine that translates traffic between networks or protocols. It’s an intermediary server separating end-user clients from the destinations that they browse. Proxy servers provide varying levels of functionality, security, and privacy depending on your use case, needs, or company policy.

A proxy server, traffic flows through the proxy server on its way to the address you requested. The request then comes back through that same proxy server (there are exceptions to this rule), and then the proxy server forwards the data received from the website to you.

4.   DNS Server:-

A DNS server is a computer with a database containing the public IP addresses associated with the names of the websites an IP address brings a user to. DNS acts like a phonebook for the internet. Whenever people type domain names, like Fortinet.com or Yahoo.com, into the address bar of web browsers, the DNS finds the right IP address. The site’s IP address is what directs the device to go to the correct place to access the site’s data.

Once the DNS server finds the correct IP address, browsers take the address and use it to send data to content delivery network (CDN) edge servers or origin servers. Once this is done, the information on the website can be accessed by the user. The DNS server starts the process by finding the corresponding IP address for a website’s uniform resource locator (URL).

1. Lightweight Directory Access Protocol( LDAP) :-

LDAP (Lightweight Directory Access Protocol) is a software [protocol](https://searchnetworking.techtarget.com/definition/protocol) for enabling anyone to locate data about organizations, individuals and other resources such as files and devices in a network -- whether on the public Internet or on a corporate Intranet. LDAP is a "lightweight" (smaller amount of code) version of Directory Access Protocol (DAP), which is part of X.500, a standard for [directory](https://searchwindowsserver.techtarget.com/definition/directory) services in a network.

A directory tells the user where in the network something is located. On [TCP/IP](https://searchnetworking.techtarget.com/definition/TCP-IP) networks (including the internet), the [domain name system](https://searchnetworking.techtarget.com/definition/domain-name-system) (DNS) is the directory system used to relate the domain name to a specific network address (a unique location on the network). However, the user may not know the domain name. LDAP allows a user to search for an individual without knowing where they're located (although additional information will help with the search).