

Module 1

Q.1) Difference between Hardware and Software.

Ans: **Hardware**

Hardware refers to the physical components of a computer system, such as monitor, CPU, Keyboard and mouse.

Hardware cannot perform any task without software.

Electronic and other materials are used to create hardware.

Hardware is not affected by viruses.

If hardware is damaged, it is replaced with a new one.

Software

Software is a set of instructions which enables the hardware to perform specific tasks.

The software cannot be executed without hardware.

Created by utilizing a computer language to write instructions.

Software is affected by viruses.

If software is damaged, it's backup copy can be reinstalled.

Q.2) Define IP address range and private address range.

Ans: **IP address**

IP address identifies machine in an IP network and is used to determine the destination of a data packet.

Private address

A private address is a range of non-internet facing IP addresses used in an internal network.

Q.3) Explain Network protocol and Port number.

Ans: **Network Protocol**

A network protocol is a set of established rules that dictate how to format, transmit and receive data so that computer network devices can communicate with each other.

They divide the communication process into discrete tasks across every layer of the OSI model, with one or more network protocols operating at each level in the communication exchange.

Port Number

Port number is a unique 16-bit integer assigned to a network-based application on a computer that identifies and directs data to the correct service.

It is used to identify the process to which an internet or other network message is to be forwarded when it arrives at a server.

Q.4) Explain Types of Network Devices

Ans: Network devices are physical hardware components that allow for communication and interaction between hardware on a computer network

Types of Network Devices

Hubs

Switches

Routers

Bridges

Gateways

Modems

Repeaters