Module 3 [Network Configuration]

# Topic: Local area networking

## Level basic :

Q1 : What is Network?

A : Network is a group of connected devices that can communicate and share information with each other.

Q2 : What is Internet & Intranet?

A: The internet is a global network for communication around the world. Intranet is a private network within an organization for internal communication.

## Level intermediate :

Q1 : How many types of Network we used?

A : We use PAN for personal devices, LAN for local network and WAN for connecting to the world.

Q2 : Different between LAN & PAN?

A : PAN is used for communication between personal devices and LAN is used for communication in a local area.

## Level Advance :

Q1 : Explain LAN .

A : LAN is a local network connecting devices like computers and printers within a small area, such as a home or office or a building .

Q2 : What are different types of LAN devices?

A : NIC , Hub , Switch etc.

# Topic: configured Network

## Level basic :

Q1 : What is configured network ?

A : A configured network is one that has been set up with specific settings, like IP addresses, to make devices communicate as intended.

Q2 : How do we configure network?

A : We can configure a network by assigning unique addresses, setting up routers, configuring DNS, using DHCP, setting firewall rules, setting Wi-Fi .

## Level intermediate :

Q1 : How to check the ip address?

A : Open Control Panel, go to Network and Sharing Center, click on your active network connection, and find your computer’s IP address under Details.

Q2 : How to check the ip address through cmd?

A : In CMD, type "ipconfig" and press Enter. Look for "IPv4 Address" to find your IP address.

Q3 : How can we enter static address in network adapter?

A : In network settings, select a network connection, go to Properties, choose IPv4 settings, fin option for a static IP, enter details, and save changes.

# Topic: Wireless networking

## Level basic :

Q1 : What is the difference between WEP and WPA?

A : WEP is older and less secure and WPA is a modern and safer wireless security protocol.

Q2 : What is Wireless Network?

A : Wireless network connects devices without physical cables, enabling communication through radio waves or infrared signals.

## Level intermediate :

Q1 : What is a wireless network connection?

A : A wireless network connection is when devices communicate without using physical cables, often using Wi-Fi or Bluetooth.

Q2 : What are the basic concepts of networking?

A : Basic networking concepts include protocols , IP addresses , routers , switches, and DNS .

## Level Advance :

Q1 : What do you need to know about networking?

A : Understanding networking involves knowing protocols, IP addressing, routers, switches, DNS, and basics of data transmission for effective communication between devices.

Q2 : How do you explain computer networking?

A : Computer networking connects devices for sharing resources and information using protocols, routers, switches, and IP addresses.

# Topic: The Internet

## Level basic :

Q1 : What do you mean by the term URL?

A : URL means Uniform Resource Locator, serving as a web address for locating resources on the internet

Q2 : Term which is used to see web pages is called what?

A : Web Browser

## Level intermediate :

Q1 : In the Ethernet which topology is used?

A : In Ethernet , generally bus and star topology is used.

Q2 : Set of rules and regulations while working on internet, which term is used?

A : ‘Netiquettes’

## Level Advance :

Q1 : What do you mean by RAS?

A : Remote Access Service

Q2 : What are the main search engines to get more website URL on Internet?

A : Google , Bing , Yahoo

Q3 : What does the PROTOCOL consist of?

A : A protocol includes rules for data transmission over a network, specifying format, sequencing, and error checking.

# Topic: Virtualization

## Level basic :

Q1 : What is Virtualization ?

A : Virtualization is creating virtual versions of computer resources, making it easier to use and manage them efficiently.

Q2 : What is the Difference between Full Virtualization and Para Virtualization?

A : Full virtualization pretends to be a complete computer, while para-virtualization adjusts the guest OS for efficiency.

## Level intermediate :

Q1 : What is Hyper-visor?

A : A hypervisor is software or hardware managing virtual machines, enabling multiple operating systems on one physical host.

Q2 : What are different hypervisors available in Linux?

A : Common hypervisors for Linux include KVM (Kernel-based Virtual Machine), Xen, and VirtualBox.

Q3 : What is Virtualization and what are its types

A : Virtualization creates virtual versions of resources. Types include server, desktop, storage, and network virtualization.

## Level Advance :

Q1 : Name the components that are used in VMware infrastructure What is benefits of Virtualization?

A : VMware infrastructure components:

ESXi, vCenter Server, vSphere Client.

Virtualization benefits:

Resource efficiency, cost savings, flexibility, isolation, and improved disaster recovery.