# Module 3 [Network Configuration]

## Topic: Local area networking

## Assignment level Basic:

1.What is Network?

ANS- A network is an arrangement of linked parts or entities with the ability to share resources or information.

2.What is Internet & Intranet?

ANS - Internet: An international system of linked computers and networks that offers the general public access to a wide range of data, services, and communication tools.

* Assignment level Intermediate:
  1. How many types of Network we used?

Ans - Local area network (LAN)

Personal area network (PAN)

Wireless local area network (WLAN)

Campus area network (CAN)

Metropolitan area network (MAN)

Wide area network (WAN)

* 1. Different between LAN & PAN?

ANS -  PAN connects the devices within the short range of an individual person, whereas a LAN connects devices at a single site, typically an office building.

* Assignment level advance:
  1. Explain LAN?

Ans - Local Area Network is referred to as LAN. It's a system of linked computers, gadgets, and resources in a constrained space, like a house, workplace, or college. LANs allow connected devices to share resources like files, printers, and internet connections

* 1. What are different types of LAN devices?

ANS - Network interface cards (NICs), routers, switches, hubs, and other devices

###  Assignment Level Basic

1. What is configured network?

Ans When a network is configured, it means that it has been put up and tailored with certain parameters, such as IP addresses, to satisfy the needs of a certain setting or organization

2. How do we configure network

ANS - Network configuration tools or commands on routers, switches, and PCs are used to configure a network, assign unique IP addresses, set subnet masks, and define gateway and DNS settings.

 Assignment level Intermediate.

1. How to check the IP address?

Ans - Select Start > Settings > Network & internet > Wi-Fi and then select the Wi-Fi network you are connected to.

Under Properties, look for your IP address listed next to IPv4 address.

1. How to check the IP address through CMD?

Ans - First, click on your Start Menu and type CMD in the search box and press enter. A black and white window will open where you will type ipconfig /all and press enter.

###  Assignment Level Advanced

1. Do a practical to release the packets from the adapter.

Ans – done

1. Do a practical to renew the lease of the IP address.

Ans – done

1. Do a practical to check the connectivity to the google.

Ans - done

## Topic: Wireless networking

### Assignment level Basic

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* 1. [What is the difference between WEP and WPA?](https://www.proprofsdiscuss.com/q/1709494/what-is-the-difference-between-wep-and-wpa)

Ans - The WPA Wi-Fi protocol is more secure than WEP, because it uses a 256-bit key for encryption, which is a major upgrade from the 64-bit and 128-bit keys used by the WEP system.

* 1. What is Wireless Network?

Ans - The term wireless refers to the fact that it does not require any physical connection (such as a wire) between devices on the network. Instead, each device communicates with other devices by sending and receiving radio signals over the air.

* Assignment level Intermediate:
  1. What is a wireless network connection?

ANS - A wireless network connection uses radio waves or infrared signals to transmit data between devices, eliminating the need for physical cables

* 1. What are the basic concepts of networking?

Ans - The foundations of networking: switches, routers, and wireless access points. Switches, routers, and wireless access points are the essential networking basics. Through them, devices connected to your network can communicate with one another and with other networks, like the Internet.

* Assignment level advance:
  1. What do you need to know about networking?

Ans - LAN vs. WAN.

Clients and servers.

DNS lookup & IP addresses.

Ethernet.

Default gateway.

Routers and switches.

* 1. How do you explain computer networking?

ANS - The process of connecting and interacting with numerous computers or devices to exchange resources and data is known as computer networking, and it usually makes use of protocols like TCP/IP.

## Topic: THE Internet

* Assignment level Basic:
  1. What do you mean by the term URL?

Ans - A URL (Uniform Resource Locator) is a unique identifier used to locate a resource on the Internet. It is also referred to as a web address.

* 1. Term which is used to see web pages is called what?

Ans - browser

* Assignment level Intermediate:

* 1. In the Ethernet which topology is used?

ANS – bus topology

* 1. Set of rules and regulations while working on internet, which term is used?

Ans – protocol.

* Assignment level advance:
  1. What do you mean by RAS?

Ans - A remote access service (RAS) is any combination of hardware and software to enable the remote access tools or information that typically reside on a network of IT devices

* 1. What are the main search engines to get more website URL on Internet?

ANS Google. Yandex. DuckDuckGo. Firefox., Microsoft.

* 1. What does the PROTOCOL consist of?

Ans – set of rules.

## Topic: Virtualization

* Assignment level Basic:
  1. What is Virtualization

Ans - By generating virtual instances of computer resources, virtualization technology allows several operating systems or apps to run on a single physical computer.

* 1. What is the Difference between Full Virtualization and Para Virtualization?

Ans - Although para-virtualization necessitates changes to the guest operating systems for increased performance and efficiency, full virtualization emulates the complete hardware for virtual machines

* Assignment level Intermediate:
  1. What is Hyper-visor?

ANS - A hypervisor is a firmware or software that allows multiple operating systems to run simultaneously on a physical computer by enabling the creation and management of virtual machines

* 1. What are different hypervisors available in Linux?

Ans - VMware is a popular choice for virtualization, and offers the ESXi hypervisor and vSphere virtualization platform. Kernel-based Virtual Machine (KVM) is an open source option and is built into the Linux® kernel. Additional options include Xen, which is open source, and Microsoft Hyper-V.

* 1. What is Virtualization and what are its types?

ANS- types include server virtualization, desktop virtualization, and network virtualization Assignment level advance:

* 1. Name the components that are used in VMware infrastructure what is benefits of Virtualization?

Ans - The ESXi hypervisor, vcenter Server, and virtual machines are parts of the VMware infrastructure; advantages of virtualization include resource optimization, cost savings, and enhanced flexibility..