Module 3 [Network Configuration]

Topic: Local area networking

• Assignment level Basic:

1. What is Network?

Ans. A network is a group of two or more computers or other electronic devices that are interconnected for the purpose of exchanging data and sharing resources.

1. What is Internet & Intranet?

Ans. The Internet is a global computer network that allows for information exchange between devices. An intranet is a private network that is only accessible to members of an organization.

• Assignment level Intermediate:

1. How many types of Network we used?

* Ans. PAN (Personal Area Network)
* LAN (Local Area Network)
* MAN (Metropolitan Area Network)
* WAN (Wide Area Network)

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. A local area network (LAN) is a collection of devices connected together in one physical location, such as a building, office, or home

2.What are different types of LAN devices? Topic: configured Network

* Ans. Public internet. The public internet is what's being accessed through the LAN. ...
* Wired end-user devices. ...
* Mobile end-user devices. ...
* Centralized server. ...
* Network switch(es) ...
* Wi-Fi router. ...
* Modem. ...
* Firewall appliance (optional)

• Assignment Level Basic

1.What is configured network?

Ans. Network configuration is the process of assigning network settings, policies, flows, and controls.

2.How do we configure network?

Ans. (NC) data is data provided by the network that represents one of the network elements in the database.

• Assignment level Intermediate.

1.How to check the ip address?

Ans. 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.

2.How to check the ip address through cmd?

Ans. From the desktop, navigate through; Logo > type "cmd.exe" in the "Start Search" dialog box . A command prompt window will appear.

At the prompt, type "ipconfig". All IP information for all network adapters in use by Windows will be displayed.

3.How can we enter static address in network adapter?

Ans. Open “Settings” on your computer.

1. Select “Network and internet.”
2. Select your current connection.
3. Select “Manage known networks” > “Properties” > “IP settings.”
4. Select “Edit.”
5. Select “Manual.”
6. Select “IPv4” and switch it to “On.”

• Assignment Level Advanced

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

Ans. done.

2.Do a practical to renew the lease of the ip address.

Ans. done.

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

Ans. done

Topic: Wireless networking

• Assignment level Basic:

1.What is the difference between WEP and WPA?

Ans. WPA (Wi-Fi Protected Access) is 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.

2.What is Wireless Network?

Ans. computer network that makes use of Radio Frequency (RF) connections between nodes in the network.

• Assignment level Intermediate:

1.What is a wireless network connection?

Ans. A wireless network refers to a computer network that makes use of Radio Frequency (RF) connections between nodes in the network.

2. What are the basic concepts of networking?

Ans. Concept of Network Interconnection Consists of connecting several computer networks based on different protocols -Requires the definition of a common interconnection protocol on top the local protocols. -The Internet Protocol

•Assignment level advance:

1.What do you need to know about networking?

* Ans. Switches. A switch is essential to computer networking. ...
* Ethernet (cabling) ...
* Network hubs. ...
* Routers. ...
* Firewall. ...
* Internet protocol (IP) addresses. ...
* Client and server. ...
* Wireless access points (WAPs)

3.How do you explain computer networking?

Ans. Computer networking refers to interconnected computing devices that can exchange data and share resources with each other.

Topic: Wireless networking

• Assignment level Basic:

1.What is the difference between WEP and WPA?

Ans. WPA (Wi-Fi Protected Access) is 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.

2.What is Wireless Network?

Ans. computer network that makes use of Radio Frequency (RF) connections between nodes in the network.

• Assignment level Intermediate:

1.What is a wireless network connection?

Ans. A wireless network refers to a computer network that makes use of Radio Frequency (RF) connections between nodes in the network.

2. What are the basic concepts of networking?

Ans. Concept of Network Interconnection Consists of connecting several computer networks based on different protocols -Requires the definition of a common interconnection protocol on top the local protocols. -The Internet Protocol

•Assignment level advance:

1.What do you need to know about networking?

* Ans. Switches. A switch is essential to computer networking. ...
* Ethernet (cabling) ...
* Network hubs. ...
* Routers. ...
* Firewall. ...
* Internet protocol (IP) addresses. ...
* Client and server. ...
* Wireless access points (WAPs)

3.How do you explain computer networking?

Ans. Computer networking refers to interconnected computing devices that can exchange data and share resources with each other.

Topic: THE Internet

• Assignm ent 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.

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

Ans. A browser is a software program used to view web pages.

• Assignment level Intermediate:

1.In the Ethernet which topology is used?

Ans. Bus topology is used with Ethernet. The most used network topology is this one. Bus and star topologies, as well as coax, twisted-pair, or fibre optic cable, are options.

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

Ans. Protocol are the rules that we follow while on the internet.In simplest of terms, Protocol is a set a rules devised for effective communication between two electronic devices.

• Assignment level advance:

1.What do you mean by RAS?

Ans. Reliability, availability and serviceability (RAS) is a set of related attributes that must be considered when designing, manufacturing, purchasing and using a computer product or component.

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

* Ans. Google. With over 86% of the search market share, one hardly needs to introduce readers to Google. ...
* YouTube. ...
* Amazon. ...
* Facebook. ...
* Microsoft Bing. ...
* Baidu. ...
* Yandex.

3. What does the PROTOCOL consist of?

Ans. In networking, a protocol is a set of rules for formatting and processing data. Network protocols are like a common language for computers.

Topic: Virtualization

• Assignment level Basic:

1.What is Virtualization

Ans. Virtualization is technology that you can use to **create virtual representations of servers, storage, networks, and other physical** machines.

2.What is the Difference between Full Virtualization and Para Virtualization?

Ans. . In Full virtualization, virtual machines permit the execution of the instructions with the running of unmodified OS in an entirely isolated way. In paravirtualization, a virtual machine does not implement full isolation of OS but rather provides a different API which is utilized when OS is subjected to alteration.

• Assignment level Intermediate:

1.What is Hyper-visor?

Ans. A hypervisor is a software that you can use to run multiple virtual machines on a single physical machine. Every virtual machine has its own operating system and applications. The hypervisor allocates the underlying physical computing resources such as CPU and memory to individual virtual machines as required. Thus, it supports the optimal use of physical IT infrastructure.

2.What are different hypervisors available in Linux?

Ans. **Compare the best Hypervisors for Linux currently available using the table below.**

* VirtualBox. Oracle. ...
* Virtuozzo. Virtuozzo. ...
* QEMU. QEMU. ...
* VMware ESXi. VMware. ...
* vSphere Hypervisor. VMware. ...
* VMware Workstation Player. VMware. ...
* Triton SmartOS. Joyent. ...
* Red Hat Virtualization. Red Hat.

1. What is Virtualization and what are its types?

Ans. Virtualization is technology that you can use to create virtual representations of servers, storage, networks, and other physical machines.

• Assignment level advance:

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

Ans. Virtual infrastructure componentsBy separating physical hardware from operating systems, virtualization can provision compute, memory, storage and networking resources across multiple virtual machines (VMs) for greater application performance, increased cost savings and easier management.