

Networking - Beginner assignment

Comptia A+ Assignment

Module -1, 2 [Hardware and its components]

- What is input device?
- What are output device?
- What is CPU?
- What are the types of CPU?
- What do we need to keep the CPU Healthy?
- Do a practical to remove processor and apply thermal paste in it and install it again
- Do a practical to Identify CPU and its Sockets.
- What is memory?
- What are the types of memory?
- Do a practical to identify memory types.
- Do a practical to install memories in system
- Do a practical to identify main memory frequencies.
- What is bios
- Describe working process of BIOS.
- Do a practical to reset bios when system is on.
- Do a practical of Hard resetting the BIOS.
- Do a practical of identifying BIOS chip from the motherboard
- What is CMOS?
- What is motherboard?
- Describe types of motherboard.
- Do a practical by identifying parts of motherboard.

- Do a practical by removing all removable parts from the motherboard.
- What is system bus
- What is chipset and types of chipset?
- Describe how does the Northbridge chipset work what is SMPS? And its purpose DO a practical to install SMPS.
- How to check smps?
- List out the types of storage devices.
- Describe the working process of storage devices.
- Do a practical to Remove storage devices and reinstall it and make a gpt disk.
- What is SATA?
- Describe the working of SATA.
- Do a practical to install SATA.
- What is SCSI storage and type of scsi?
- What is I/O ports?
- List out the I/O ports available Do a practical to identify the I/O ports
- What is Boot Process?
- Describe the boot process in Linux?
- List out the types of display?
- What is printer? And type of printer
- Do a practical to install the printer
- Do a practical to Troubleshoot the improper printing.
- What are the parts of laptop?
- Do a practical to disassemble the laptop.

Module – 3 Installation and Maintenance of Hardware and Its components

- What is user management?
- Where can we access the user management?
- Why is user management needed?
- Do a practical to create a user from user management
- Do a practical to change the password of the administrator from the user management What is file folder permission?---sharing and ntfs What is the use of file and folder permission?
- Write down the steps to give a folder read only permission.
- Write a step to give a file only admin permission.
- Do a practical to change the ownership of the folder and the sub folders in it.
- What is OS?
- What are the types of OS?
- Do a practical to create bootable pen drive for kali Linux and install os
- Do a practical to create a bootable pen drive for windows 10 and install os
- Do pen drive for creating a pen drive for mac os Big sur with unibeast.
- What is clean install?
- What is upgrade installation?
- Do a practical to upgrade from windows 8 to windows 10.
- What is partitioning?
- What is partition?
- What is format?
- Format a partition using cmd.
- List out the administrative tools.
- What is disk management tools
- List out the operations we can do with disk management tool
- What is Device Management?

- Do a practical to delete a driver from the device management tool.
- What is windows features?
- Do a practical to install dotnet framework 3.5 with Windows feature.
- Do a practical to disable internet explorer in windows feature
- What is backup and restore?
- What are the tools of backup?
- Do a practical to restore from restore point.
- How to protect system from malfunctioning due to electrical fluctuation?
What is os base firewall? And configure inbound and outbound rule
- Do a practical to block internet with firewall.

Module-4

- What is troubleshooting?
- Do a practical to change the administrator account forge password.
- How do you troubleshoot a computer with no display on screen?
- You get the blue screen of death?
- Do a practical to repair OS.
- Do a practical to repair boot file
- DO a practical to recover deleted file
- Do a practical to recover the formatted file
- Do practical to recover data from the os Corrupted file
- What is the basic troubleshooting for printer?
- What are the basic troubleshooting for laptop? check the laptop which is not starting up practical to disassemble the laptop and change the corrupted ram practical to change the cartridge of the printer

N+ Assignment

Module -1

- What is network?
- Explain type of network-- LAN, MAN, WAN?
- What is Internet?
- Define Network Topologies
- Define list of cables in use of network—Twisted pair , fiber optics
- Straight cable standard sequence 568 A and 568 B
- What is fiber optics module and fiber connector
- Explain Switch
- Explain Router
- Explain MODEM
- Explain DHCP Dynamic host configuration protocol Explain Domain Naming Services What is protocol?
- What is unicast multicast and broadcast?
- What is OSI model?
- What is port number?
- Difference between TCP V/S UDP communications What is session development?
- What is flow control?
- What is the difference between TCP IP model and OSI model?
- What is arp broadcast?
- What is mac-address?

- What is ip address? Difference between ipv4 address and ipv6 address
Assign multiple IPv4 in single network adapter in pc what are network vulnerabilities?
- What is a firewall to use for?
- Wireless router configure for internet connection and wireless security
what is wireless access point? And what is wireless extender?

Module – 2

- What is SOHO network?
- What is NAT?
- What is PAT?
- Different between NAT & PAT?
- What Is Acl?
- What Are Different Types of Acl? What Is Wildcard Mask?
- Explain Circuit switching
- What is difference between leased line and broadband?
- Difference between a POTS line and a leased line?
- Practice on printer sharing
- Use of IIS
- Create FTP server ,
- What is the difference between cloud and virtualization?
- Why are network monitoring tools used?
- What is ping ?
- What is traceroute ?
- What is nslookup?
- Explain core switches

- What is network management?
- Explain Event Viewer
- Practice "parental control" or "family safety" option in control pane What are network vulnerabilities?
- What are the types of network security attacks?

CCNA Assignments

Module -1

- Explain is the OSI reference model?
- What is a Network?
- What are Routers?
- Explain Encapsulation.
- Peer-to-Peer Communication.
- What is TCP and UDP?
- What is Internetwork Operating System software?
- Explain LAN and draw any example.
- Explain Network Device – Router Switch and Hub.
- Describe Router and switch connection in LAN.
- Types of Cable – explain types of Ethernets and speed.
- Explain TCP/IP –List of Protocol and port Number.
- Explain Node(backborn) and Physical layer.

Module – 2

- Describe IPv4 address range and explain example of subnetting.
- List of private address.
- What is routing? Explain work of Router and protocol.
- Which software we are use for routing and switching.
- Explain Basic command.
- Types of Routing – example of Static routing.
- Explain Dynamic routing.
- Deference btw RIP EIGRP and OSPF.
- Perform Example of RIP EIGRP and OSPF with different area concept.
- Example of Default routing.
- Explain Autonomous system number.
- What is switching explain VLAN?
- What is Access port and trunk port?
- List of basic SHOW command.

- Explain of Layer 2 and Layer 3 switch.
- Example – VLAN Access port and trunk port.
- Example of inter VLAN routing.
- Explain switching method and VTP.
- What is spanning Tree – Mention spanning tree protocol and algorithm.
- Example of Per VLAN spanning tree.
- What is IPv6? Explain types and ip address range.
- Example of Ipv6 – RIP

Module – 3

- Explain Cisco Wireless Technology.
- List of IEEE standard.
- Explain Wireless Topologies.
- Explain Wireless security protocol and Encryption method type.
- Example of DHCP configuration.
- What is ACL? Types of ACL and Example of Extended ACL.
- Example of Port security in Switch.
- List Of WAN connection with protocol.
- Explain Frame–Relay and PPP.
- What is NAT? explain with one example.
- What is HDLC? Which command using to show in software.
- What is Encapsulation? example of GRE Tunnel.

Module-4

- List of IP services Types and Example of HSRP?
- Example of Backup and restore Router managing IOS?
- Explain Security Threat.
- List of Basic security of Password – Example with apply password in Router.
- Describe threat defense technologies.

Module-5

- Explain How Automation Impacts Network Management.
- Compare Traditional network with Controller based networking.
- Explain Virtualization.
- Describe Characteristics of REST-based API.
- Explain DNA Center.
- Explain SDN.