Ans: vlan are networks segments on a switched lan. Intervlan routing refers to the movement of packets across the network between hosts in different network segments.

1. What is trunk port?

Ans: type of connection on a switch that is used to connect a guest virtual machine that is VLAN aware.

### Advance Question

1. How to configure Trunk port?

Ans: cmd and using specific commands

2. How to delete VLAN information from Switch?

Ans: First select network than configuration than select vlan tab click on vlan to remove click delete done.

## Module 6. Network security, Maintenance and Troubleshooting procedures

### Topic: A SOHO Networks

### Beginner Question

1. What is SOHO network?

Ans: soho is a type of network that designed for small and home office.

2. What does SOHO mean networking?

Ans: SoHo's full form is small office Home office.

## Intermediate Question

1. How does a SOHO network work?

Ans: soho network based on lan connection and it connect our office to corporate offices and communication each other.

2. Issues with Soho Networking?

Ans: soho network works in small criteria and it's also not secure.

## Advance Question

1. How Small is the "S" in SOHO?

Ans: its criteria is one office or or one home office.

2. SOHO Routers vs. Home Routers?

Ans: home router is less secure as compare to soho router and also bandwidth is better in soho router it's fully private network but in case of home router it's public network.

# Topic: NAT & PAT

## Beginner Question

1. What is NAT?

Ans: nat is a technology that convert private ip to public ip to go through internet using public

2. What is PAT?

Ans: pat also translate private ip to public but it uce port number.

3. Different between NAT & PAT?

Ans: both are translate private ip to public ip but pat uses port number to do this work.

## Intermediate Question

1. However, Will Nat work?

Ans: when we need to uce internet it's require public network but when we used like lan connection it require public ip so mat will convert our private ip to public ip.

2. Explain NAT?

Ans: when we need to uce internet it's require public network but when we used like lan connection it require public ip so mat will convert our private ip to public ip.

## Advance Question

1. What is different between Static & Dynamic NAT?

Ans: in static nat admin needed for write a ip and in dynamic nat automatic ip provided.

2. NAT stand for?

Ans: nat stand for ip

3. PAT stand for?

Ans: pat stand for port number

# Topic: Authentication and Access Control

## Beginner Question

1. What Is Acl?

Ans: acl is a set of rule that give access and denied the access

2. What Are Different Types of Acl?

Ans: extended acl and standard acl..

## Intermediate Question

1. Explain Standard Access List?

Ans: standard access list a type of acl that decrease traffic in source ip.

2. Explain Extended Access List?

Ans: extended access list a type of acl that filter packets in topology.

## Advance Question

1. What Is Wildcard Mask?

Ans: wild card mask is totally different as a subnet mask because in wild card mask all zero is one and all one is zero in bit.

2. In Which Directions We Can Apply an Access List?

Ans: close to the source.

# Topic: WAN Technologies

## Beginner Question

1. Fiber-optic communication

Ans: fibre optic is a science that help to transfer data in light form point to point.

2. What is Leased Line

Ans: leased line Is a virtual lie that transfer data point to point.

3. Explain Circuit switching

Ans:Circuit switching is a type of network configuration in which a physical path is obtained and dedicated to a single connection between two endpoints in the network for the duration of a dedicated connection

## Intermediate Question

1. Explain Packet Switching

Ans: packet switch is transfer data in small quantities in network.

2. What is difference between leased line and broadband?

Ans: leased line has a dedicated connection and broadband has not a dedicated connection.

3. How much is a 100mb Leased Line?

Ans: maybe around 400000 tcl.

## Advance Question

1. Difference between a POTS line and a leased line?

Ans: leased lines are generally not switched circuits, and therefore do not have an associated telephone number

2. What is the process of packet switching?

Ans: packet switching transfer data in whole network in small quantities like 1500byte.

3. Difference between circuit switching and packet switching?

Ans: A circuit-switched network relies on a physical connection between two nodes, which requires the link to be set up before the nodes can communicate. In contrast, a packet-switched network is a digital network that manages data transfer in the form of small and optimized packets, an improvement from older network types

4. Practice on printer sharing

Ans: done

5. Use of IIS [ Via "add and remove" feature from control panel. "appwiz.cpl" command]
   Ans: done

# Topic: Communication technologies Cloud and Virtualization

## Beginner Question

1. What is virtualization?

Ans: virtualization is a technology that help computer to run multiple os at one pc.

2. What are two types of virtualization in cloud?

Ans: internal and external

## Intermediate Question

1. What are the two types of virtualization?

Ans: full virtualization and os level virtualization.

2. What is VMware virtualization technology?

Ans: Vmware is a tool that help to make many os in one

device.

## Advance Question

1. What is the difference between cloud and virtualization?

Ans: virtualization creates simulated versions of a machine's software or hardware components, while cloud computing is a model that enables users to access a shared pool of resources conveniently.

2. What are the benefits of implementing virtualization in cloud computing?

Ans: reduce cost, electricity power, and time also.

# Topic: Monitoring Tools

## Beginner Question

1. Why are networke monitoring tools used?

Ans: To help admin for monitor their infrastructure.

3. Explain firewalls

Ans: firewall is a security device that filter network traffic.

## Intermediate Question

1. Explain core switches

Ans: core switch is a device that help to connect access switches.

2. Explain client systems

Ans:client system is a device that requires server permission to access services.

## Advance Question

1. What is network management?

Ans: total of applications, tools and processes used to provision, operate, maintain, administer and secure network infrastructure.

2. Explain Event Viewer

Ans: Event viewer is a tool that give information about what event running and pending in computer.

3. Practice "parental control" or "family safety" option in control panel

Ans: done.

# Topic: Network Security, Network vulnerabilities

## Beginner Question

1. What are network vulnerabilities?

Ans: Network vulnerability is a fault in hardware and software in result network data bridges.

2. What are the types of network security attacks?

Ans: malware phishing, dos attack, SQL, man in the middle

attack and more.

## Intermediate Question

1. What is virus in network security?

Ans: virus is a file that harm our computer without our permission and without knowing us.

2. What is the difference between virus and antivirus?

Ans: virus is file that harm our pc and antivirus is tool that delete virus and protect our pc.

## Advance Question

1. Who is vulnerable in network security?

Ans: Network vulnerability is a fault in hardware and software in result network data bridges.

2. How do you assess vulnerability?

Ans: using any scanning tools and restrict permissions and update security time to time.

3. What are the principles of network security?

Ans: confidentiality, integrity, and availability

4. What is a firewall to use for?

Ans: firewall is a network security device that prevents unauthorized access to a network

5. configure advanced firewall setting? 6. configure "date and time" opti

Ans: Done.

# TERM-2 CCNA Assignment

## Module 7 Network fundamentals

### Advance Question

1. Explain Network Topologies
2. Explain TCP/IP Networking Model
3. Explain LAN and WAN Network
4. Explain Operation of Switch
5. Describe the purpose and functions of various network devices
6. Make list of the appropriate media, cables, ports, and connectors to connect switches to other