

### ☒ 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

Ans: topology is a structure that includes network layer 2 and layer 3 devices and end devices for communication purpose.

2. Explain TCP/IP Networking Model

Ans: TCP/ip is a network module that divide in 4 layer.

3. Explain LAN and WAN Network

Ans: Lan works in only works in one building particular location and office.

Wan works in large distance like two city.

4. Explain Operation of Switch

Ans: provides a way to branch an API's assembly depending on the operation that is called

5. Describe the purpose and functions of various network devices

Ans: for better performance and less problems.

6. Make list of the appropriate media, cables, ports, and connectors to connect switches to other

Ans: done

7. Define Network devices and hosts

Ans: A network node is any device participating in a network. A host is a node that participates in user applications, either as a server, client, or both.

8. What are Ethernet Standard (802.3) and Frame Formats?

Ans: 802.3 is a standard for all mac implementations.

And frame has 2 types '0' and '1' and when device communicate each other that communication possible using this format.

## ☒ Intermediate Question

1. Comparison between UTP, MM and SM Ethernet Cabling

Am is far better than mm and lto because sm can carry long distance and high speed data transfer.

2. Make Cross cable

Ans: done

3. Make Straight-Through Cable

Ans: done

4. Differentiate between LAN/WAN operation and features

Ans: Lan works in only works in one building particular location and office.

:Wan works in large distance like two city Explain ARP, ICMP and Domain name

5. Describe the components required for network and Internet communications

Ans: server, router, switch, modem, gateway, firewall, cables, and many more

6. Explain Encapsulation and DE capsulation in OSI Reference model 8. Explain network segmentation and basic traffic management concepts

And: Encapsulation adds information to a packet as it travels to its destination. Decapsulation reverses the process by removing the info, so a destination device can read the original data.

9. What is flow control and acknowledgment?

**Ans:** to throttle the amount of data transmitted to avoid overwhelming the receiver's resources.

## ✘ Advance question

1. Use the OSI and TCP/IP models and their associated protocols to explain how data flows in a network

**Ans:** Data flows from layer 7 down to layer 1 from the sender, and then flows from layer 1 to layer 7 on the recipient device.

2. Identify and explain at layers 1, 2, 3, and 7 using a layered model approach

**Ans:** done

2. Explain CSMA/CD and CSMA/CA

**Ans:** these two are network protocols. CSMA/CD is mostly used in wired networks and CSMA/CA is used in wireless networks.

3. Explain this frame and find layer

**Ans:** don't know.

4. Draw and explain Cisco hierarchical model

**Ans:** hierarchical model divides enterprise network into 3 layers: core, distribution, and access layer.

5. Drawing of a typical wired and wireless enterprise LAN

**Ans:** done

6. Describe the uses of straight-through and crossover Ethernet cables

**Ans:** when you connect two different devices you need a straight cable, but when you want to connect two same devices you need a cross cable.

Ethernet (802.3) Frame Format							
7 bytes	1 byte	6 bytes	6 bytes	2 bytes	42 to 1500 bytes	4 bytes	12 bytes
Preamble	Start of Frame Delimiter	Destination MAC Address	Source MAC Address	Type	Data (payload)	CRC	Inter-frame gap

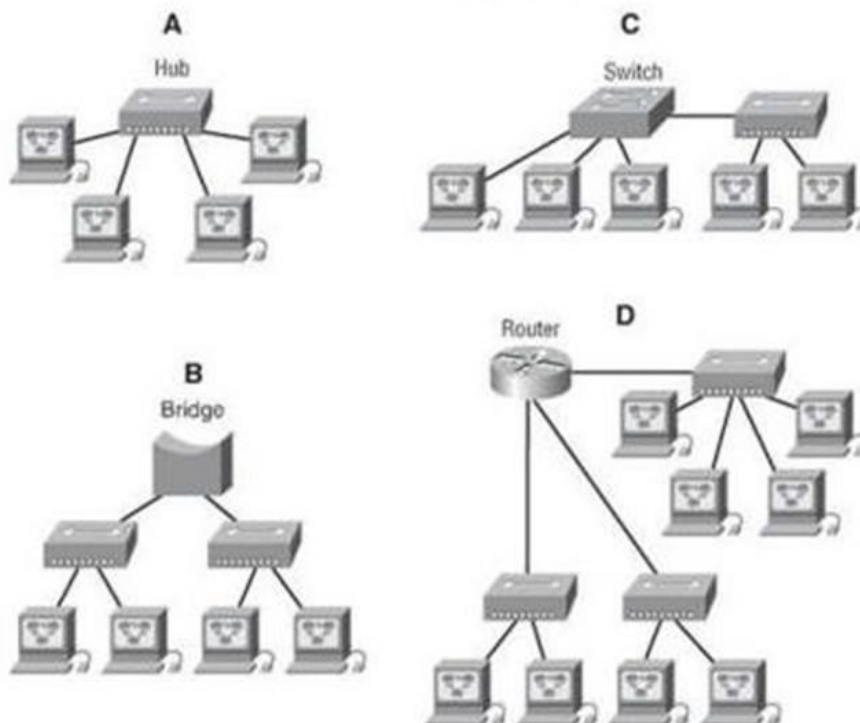
7. Explain Layer 2 and Layer 3 Switch

**Ans:** layer 2 switch communicates using MAC table, and layer 3 switch communicates

using ip table.

## 8. Identifying Collision and Broadcast Domains

Ans: done



## 9. Explain Spanning Tree Protocol

Ans: spanning tree protocol mostly uses for termities loops and broadcast storms.

## 10. Explain unicast Multicast and Broadcast

Ans: unicast means one data sender and one data receiver. And broadcast means one data sender and several data receivers.

11. Explain CAM (Content Addressable Memory)

Ans: a chip that provides fast table lookups, most notably in network routers and switches

14. Which command use of Show MAC TABLE?

Ans: #show mac-address table.

## Module 8 Network Access

### ✘ Beginner Question

1. Explain Switch
2. Explain Switch Boot Sequence
3. Explain Three Methods to access Switch Command Line Interface
4. Explain and Configuring the Cisco Internet Operating System
5. Explain Switch Port



6. Configure Basic Password Settings on a switch
7. Configure Line Password Settings on a switch
8. Configure Password Settings on a switch
9. Configure IPv4 on a switch
10. Verifying IPv4 on a switch
11. Explain Basic V LAN
12. Explain VTP 13. Explain CDP.
14. Identifying VLAN
15. Describe the basic operation of STP
16. Explain IPv4 subnetting.
17. What is subnet mask?
18. Explain binary decimal hexadecimal with example