**Networking Services**

1.Question 1

**A technique that’s used to route traffic to different destinations, depending on factors like location, congestion, or link health, is known as \_\_\_\_\_.**

unicastanycastmulticastbroadcast

Ans :2

**Correct**

You got it! Anycast lets you route traffic depending on many factors.

2.Question 2

**TLD stands for \_\_\_\_\_\_\_\_**

Tidal Locked DestinationType Level DomainTop Level DomainTypical Looking Domain

Ans :3

**Correct**

Great work! A TLD is the last part of an FQDN.

3.Question 3

**A \_\_\_\_\_\_\_ record is responsible for resolving an IP to a domain name.**

CNAMEPTRNTPTXT

**Ans:2**

**Correct**

You nailed it! PTR records operate as the inverse of an A Record.

4.Question 4

**When a range of IP addresses is set aside for client devices, and one of these IPs is issued to these devices when they request one, this is known as \_\_\_\_\_\_\_ allocation.**

automaticdynamicfixed

Ans:2

**Correct**

Great job! Dynamic Allocation DHCP will assign a random IP from a pool of IPs to a device that needs one.

5.Question 5

**VPN stands for \_\_\_\_\_\_\_**

Very Personal NetworkVirtual Private NetworkVirtual Public NetworkVirtual Proxy Network

Ans:2

**Correct**

You got it! A VPN allows a device to establish an encrypted tunnel to another network.

6.Question 6

**At the very lowest level, what data does a computer understand?**

IP (Internet Protocol) addressesHexadecimal digitsMedia Access Control (MAC) addressesBinary numbers

Ans:4

**Correct**

Right on! Binary numbers are zeros and ones. Fortunately, computers present data in a much friendlier way.

7.Question 7

**The Domain Name System (DNS) network service uses which transport layer protocol?**

Transmission Control Protocol (TCP)Hypertext Transfer Protocol (HTTP)User Datagram Protocol (UDP)IP (Internet Protocol)

Ans:3

**Correct**

Awesome! DNS uses the UDP protocol for queries and resolution. It is a connectionless protocol.

8.Question 8

**The Dynamic Configuration Host Protocol (DHCP) operates at which Open Systems Interconnection (OSI) model layer?**

TransportApplicationPresentationNetwork

Ans:2

**Correct**

Awesome! The application layer is used for communication protocols and methods in a network.

9.Question 9

**Network Address Translation (NAT) is typically implemented with which hardware devices? Check all that apply.**

Switches

Hubs

Routers

**Correct**

You got it! A router is used on a network for a number of reasons, including NAT.

Firewalls

**Correct**

Great work! A firewall provides network protection. Most firewalls can provide NAT services.

**Ans:3,4**

**Correct**

Great, you got all the right answers.

10.Question 10

**Which technology uses a tunneling protocol?**

Network Address Translation (NAT)Domain Name System (DNS)Virtual Private Network (VPN)Dynamic Host Configuration Protocol (DHCP)

Ans:3

**Correct**

You got it! A VPN uses a tunnel to maintain private and secure communications.

11.Question 11

**During the name resolution process, which server does a local recursive server contact first?**Top level domain (TLD) serverAuthoritative name serverRoot name serverCaching name server

**Incorrect**

Not quite. Please review the videos in the "Name Resolution" module for a refresher.

12.Question 12

**A complete Fully Qualified Domain Name (FQDN) is limited to how many characters?**1275363255

Ans:4

**Correct**

Awesome! A complete FQDN can be up to 255 characters.

13.Question 13

**What term defines keeping the address of one computer secret from another?**

PreservationRewritingTranslationMasquerading**1 / 1 point**

**Ans:4**

**Correct**

Right on! Masquerading is when NAT is used to hide the IP of a computer from another.

14.Question 14

**A Virtual Private Network (VPN) uses a particular layer from the OSI reference model to carry an encrypted payload that actually contains an entire second set of packets. Which layer is used?**

TransportApplicationPresentationNetwork

Ans:1

**Correct**

You got it! The payload section of the transport layer is used to contain an entire second set of packets.

15.Question 15

**What is the importance of using DNS?**Assigning addressesGet connectedName resolutionSecuring a network

Ans:3

**Correct**

Awesome! The Domain Name System (DNS) use records to resolve numeric addresses to friendly names.

16.Question 16

**When a client computer sends a request to a Domain Name System (DNS) server, what type of packet is sent?**ACKSYNSYN/ACKTCP

**Incorrect**

Not quite. Please review the videos in the "Name Resolution" module for a refresher.