

IRM4721 Assignment 1

Assignment due date: **11April 2022**

Number of example questions: 50

IMPORTANT TO NOTE:

I'm still working to get the Quiz correctly loaded on the new LMS, in the meantime here are the possible questions that can be asked, to allow you to research your answers and be ready to answer the quiz once it is available on the myUnisa.

Please note that you need to understand each answer, rather than simply trying to find the solution, without any insight! Consult and research as many sources as you need to get to a conclusive answer. The questions below, relate to the **fundamentals of networking**. Some of the questions asked here will be discussed in more details in later chapters, or you should already have knowledge on these topics from previous years of computer network study. You are however welcome to look around in the chapters which will follow later this year, if these will help you with finding the answers to the questions below. Due to the variety of students enrolled for this module, I need to ask fairly rudimentary background knowledge type questions to ensure that we are all on the same page, before we endeavor on assignment 2, assignment 3 and the exam at the end of the year.

All the best – feel free to email me with any questions of if you need assistance.

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When ready, complete the quiz online (MyUnisa)

Question

True or false? **DNS** servers match host names to IP addresses.

1. **True**
2. False

Question

Which one of this best describes UTP?

1. Unterminated Twisted Pair
2. Universal Termination Protocol
3. **Unshielded Twisted Pair**
4. Universal Terminal Paired cable

Question

The DNS offers a CNAME type that is analogous to a symbolic link in a file system, the CNAME entry provides a(n) _____ for another DNS entry

1. SMTP record
2. Hash-Tag
3. Meta-Tag
4. **Alias**

Question

The IEEE _____ specifies standards **for wireless networks**. Choose the one best answer below to fill in the blank.

1. 802.08
2. 802.10
3. **802.11**
4. 802.13

Question

Which network medium contains a layer of braided wire or foil between the core and the outside insulating layer, plus another layer of plastic or rubberized material that separates the central core from the shielding layer?

1. **Coaxial**
2. Fiber optic
3. Twisted pairs
4. Braidcore

Question

True or false? The Internet Assigned Numbers Authority (IANA) implemented **classful** IPv6 addresses in order to differentiate between the portion of the IP address that identifies a particular network and the portion that identifies a specific host on that network.

1. True
2. False

Question

You have a series of hostnames that you need to verify are correctly registered in DNS. Which of the following tools is the most appropriate for you to utilize?

1. ping in command mode
2. nslookup in interactive mode
3. netstat in verification mode
4. ipconfig in display mode

Question

You need to connect two networks that work on two different **network protocols**. Which of the following should be used?

1. Firewall
2. **Gateway**
3. DMZ
4. NAS

Question

True or false? **Brouters** combine the characteristics of switches and routers.

1. True
2. **False**

Question

What might be the cause if you are unable to connect to radio wireless device?

1. Out of range
2. Wireless router turned off
3. Security settings preventing connections
4. **All of the above**

Question

Which OSI layer addresses data messages, translates logical addresses into actual physical address, and routes data to addresses on the network?

1. Layer 1 – Physical
2. Layer 2 – Data Link
3. **Layer 3 – Network**
4. Layer 4 – Transport

Question

After installing the **DHCP Server** service on a domain member server, what must be done in Active Directory before it begins delivering leased IP addresses?

1. Activate it
2. Modify the firewall rules.
3. Enable the Active Directory.
4. **Authorize it.**

Question

Which of the following is used as a unique NIC identifier?

1. SSH
2. WINS
3. MAC
4. DNS

Question

You would like to view the network path that is taken by packets across your internal routers before exiting your LAN and heading out into the Internet. Which of the following commands will show the route that packets take across the network?

1. Nslookup
2. Tracert
3. Ping
4. Trace

Question

An IPv6 subnet ID is how many bits long?

1. 16
2. 32
3. 64
4. 128

Question

Which of the following is a reason to revoke a certificate?

1. A newer certificate has been issued to the user or computer
2. The private key has become known to someone other than the holder
3. The user or computer is no longer employed by the company
4. All of the above

Question

True or false? War **chalking** is the process of marking buildings, curbs, and other landmarks indicating the presence of an available access point and its connection details by utilizing a set of symbols and shorthand.

1. True
2. False

Question

Twisted pair network cable uses which RJ connector?

1. RJ-11
2. RJ-14
3. RJ-25
4. RJ-45

Question

You have been asked to explain what a certain IP address is used for. The IP address is 224.0.0.1. What are addresses in the 224.0.0.0 range used for?

1. Multicasting
2. Unicasting
3. SNMP
4. HTTP

Question

Identify the topology displayed in the Figure 1 below.

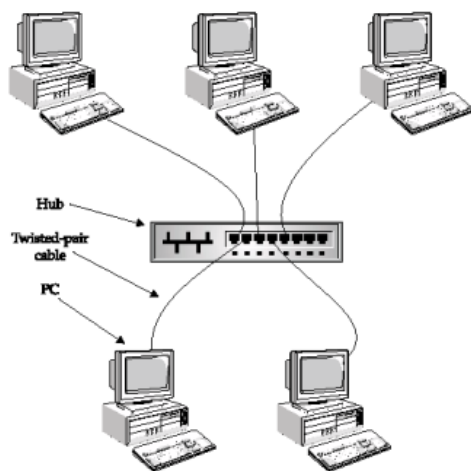


Figure 1: Network topology for question 5.

1. Star-shaped Bus
2. Star
3. Hub
4. Star-shaped Ring

Question

Which TCP/IP-based management protocol implemented on routers provides for security?

1. TFTP
2. Simple Network Management Protocol (SNMP) (CMIP)
3. CMIP over TCP/IP (CMOT)
4. Common Management Information Protocol

Question

What AWG gauge is most common for cross-connect jumpers?

1. 24
2. 25
3. 23
4. 20

Question

To deliver mail to a specific ip address, a matching _____ must be configured in the DNS system.

1. SMTP record
2. DNS record
3. CNAME
4. **MX** record

Question

What are two popular options for horizontal runs to modular office systems?

1. Consolidation points and multiuser outlets
2. Cable trays and patch panels
3. Straight runs and splices
4. Multi drop coax and hubs

Question

If a word mp3 file is sent over SMTP, the following extension is used:

1. MINE
2. **MIME**
3. Smap
4. Nmap

Question

SSL is not considered an secure transfer protocol?

1. True
2. **False**

Question

How many octets are in an IPv4 address?

1. 4
2. **8**
3. 6
4. 2

Question

In order to send more than one bit at a time during a single phase on a carrier, _____ modulation is used:

1. Amplitude
2. Harmonic wave
3. Phase Shift
4. Frequency

Question

The built-in identifying address coded into the NIC by the manufacturers is called which of the following?

1. Port address
2. IPv6 address
3. **MAC** address
4. IPv4 address

Question

What protocol matches internet IP addresses to domain names?

1. **DNS**
2. DHL
3. DIR
4. DHCP

Question

SMTP is a very secure protocol, and ensure encrypted file transfer protection:

1. True
2. **False**
3. Only if used as intended

Question

Smaller companies and individuals use a(n) _____ to make the connection to a commercial backbone

1. Radial
2. Router
3. Firewall
4. **ISP**

Question

IP address 102.168.212.226 is an example of which of the following classes of IP addresses?

1. Class C
2. Class D
3. **Class A**
4. Class B

Question

Which IEEE standard defines the communication protocol for Ethernet?

1. 802.15
2. 802.5
3. **802.3**
4. 802.11

Question

Repeaters are typically used on what type of networks?

1. Ring
2. Bus
3. Hybrid
4. Star

Question

Which properties of a cable are distorted by sharp bends?

1. Fire resistance
2. Electrical
3. Reliability
4. Replacability

Question

How many bits is an IPv6 address?

1. 8
2. 128
3. 32
4. 64

Question

The original four NAPS are called what?

1. Public Internet exchange points
2. Private Internet exchange points
3. Commercial Internet Exchange (CIX) points
4. Federal Internet Exchange (FIX) points

Question

You are a user in a company that would like to connect to the company's wireless network. What information must you know in order to connect to the wireless network?

1. Password
2. Frequency
3. SSID
4. Username

Question

TRUE or FALSE? **Multi-mode** fiber optic cable is used mostly for long distances (over to 500 m).

- 1 True
- 2 False

Question

Bridge operate at which OSI layer?

1. Physical
2. **Transport**
3. Network
4. Data

Question

E-mail protocol used to send and receive e-mail messages between e-mail servers and used by e-mail client to send messages to the server, but not used to retrieve e-mail from a server?

1. IMAP4
2. SIP
3. SMTP
4. **POP3**

Question

FTP stands for

1. File Transfer parcel
2. File Transcend protocol
3. **File transfer protocol**
4. Fast Transfer Protocol

Question

Which TCP/IP architecture layer makes use of ports?

1. Internet
2. Transport
3. Application
4. **Network Interface**

Question

To encode binary to a carrier that is part of the electromagnetic spectrum a_____ is used .

1. Modem
2. Switch
3. Gateway
4. Router

Question

The interface on the access point used to connect to the existing wired network is typically called what?

1. **WAN**
2. Transmitter
3. Port Antenna
4. Wireless NIC

Question

True or false? Windows 10 clients have no way of supporting IEEE 802.1x authentication.

1. True
2. False

Question

To which TCP/IP architecture layer do the access methods belong?

1. Transport
2. Network Interface
3. Internet
4. Application

Question

Network backbone cabling run from floor to floor connecting the main cross-connect to intermediate cross-connects on each floor is referred to as _____ cabling.

1. Lateral
2. Vertical
3. Routing
4. Plenum

Question

In which network topology is each node connected to the next by a direct line so that a continuous line is formed?

1. Mesh
2. Star
3. Ring
4. Bus