DEPARTMENT OF EDUCATION
REGION X - NORTHERN MINDANAO
DIVISION OF CAGAYAN DE ORO CITY
Fr. William F. Masterson, SJ Avenue, Upper Balulang, Cagayan de Oro City

Learning Activity Sheets

Computer System

SHARED OPTIONS
Senior High Alternative Responsive Education Delivery

Preface

It has been elaborated in research and literature that the highest performing education systems are those that combine quality with equity. Quality education in the Department of Education (DepEd) is ensured by the learning standards in content and performance laid in the curriculum guide. Equity in education means that personal or social circumstances such as gender, ethnic origin or family background, are not obstacles to achieving educational potential and that inclusively, all individuals reach at least a basic minimum level of skills.

In these education systems, the vast majority of learners have the opportunity to attain high-level skills, regardless of their own personal and socio-economic circumstances. This corresponds to the aim of DepEd Cagayan de Oro City that no learner is left in the progression of learning. Through DepEd's flexible learning options (FLO), learners who have sought to continue their learning can still pursue in the Open High School Program (OHSP) or in the Alternative Learning System (ALS).

One of the most efficient educational strategies carried out by DepEd Cagayan de Oro City at the present is the investment in FLO all the way up to senior high school. Hence, Senior High School Alternative Responsive Education Delivery (SHARED) Options.

Two secondary schools, Bulua National High School and Lapasan National High School, and two government facilities, Bureau of Jail Management and Penology-Cagayan de Oro City Jail and Department of Health-Treatment and Rehabilitation Center-Cagayan de Oro City, are implementing the SHARED Options.

To keep up with the student-centeredness of the K to 12 Basic Education Curriculum, SHARED Options facilitators are adopting the tenets of Dynamic Learning Program (DLP) that encourages responsible and accountable learning.

This compilation of DLP learning activity sheets is an instrument to achieve quality and equity in educating our learners in the second wind. This is a green light for SHARED Options and the DLP learning activity sheets will continually improve over the years.

Ray Butch D. Mahinay, PhD
Jean S. Macasero, PhD

Acknowledgment

The operation of the Senior High School Alternative Responsive Education Delivery (SHARED) Options took off with confidence that learners with limited opportunities to senior high school education can still pursue and complete it. With a pool of competent, dedicated, and optimistic Dynamic Learning Program (DLP) writers, validators, and consultants in Senior High School Technical Vocational Livelihood Learning activity Sheets , the SHARED Options is in full swing.

Gratitude is due to the following:

- Schools Division Superintendent, Cherry Mae L. Limbaco, PhD, CESO V, Assistant Schools Division Superintendent Alicia E. Anghay, PhD, for buoying up this initiative to the fullest;
- CID Chief Lorebina C. Carrasco, and SGOD Chief Rosalio R. Vitorillo, for the consistent support to all activities in the SHARED Options;
- School principals and senior high school teachers from Bulua NHS, Lapasan NHS, Puerto NHS and Lumbia NHS, for the legwork that SHARED Options is always in vigor;
- Stakeholders who partnered in the launching and operation of SHARED Options, specifically to the Bureau of Jail Management and Penology-Cagayan de Oro City Jail and the Department of Health-Treatment and Rehabilitation Center-Cagayan de Oro City;
- Writers and validators of the DLP learning activity sheets, to which this compilation is heavily attributable to, for their expertise and time spent in the workshops;

- Alternative Learning System implementers namely Willy P. Calo Ailiene P. Libres, Rubeneth V. Salazar and Metocila O. Agbay, Puerto National High School, Leneth G. Udarbe, Lapasan National High School and Pinky B. Dela Calzada, for the technical assistance given to the sessions;
- Reproduction (LRMDS) Gemma P. Pajayon and Lanie M. Signo; and
- To all who in one way or another have contributed to the undertakings of SHARED Options.

Mabuhay ang mga mag-aaral! Ito ay para sa kanila, para sa bayan!

Ray Butch D. Mahinay, PhD
Jean S. Macasero, PhD

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5	Introduction to Active Directory Objects			
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Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Configure Server Function		
Learning Competency : Check normal server function in accordance with manufacturer's instructions (TLE_IACSS9-12SUCS-IIIa-e-38) Enabling Skills: Explain the Features of a Computer Server		
References : http://tiny.cc/z12t9y http://tiny.cc/qp8t9y		LAS No.: 1

CONCEPT NOTES:

- A server is a computer used in a network and which provides a service to a client.
- Servers usually have more processing power, memory and storage than client computers.

Features of a Computer Server

- Has a **powerful RAM or memory** to effectively handle different requests from different computers and perform operations at a speedy pace
- Has **optimum processor speeds** sufficient enough to execute all the commands requested by other machines and multitask as well.

- Has h**igh-capacity hard drives and storage** for storing large amounts of data.
- Has **cooling fans** to cool down such an overworked and powerful machine.
- Has an **effective operating system** which is stable and capable of handling multiple operations.
- Has **fault tolerant, reliable, and sturdy machine ware** that will not break down from overuse.
- Has an **uninterrupted power supply** for continuous performance so that the server will not suffer from power failures.
- Has a **redundant hardware or backup drive** so that if one hard drive fails, a backup drive can work in its place.

EXERCISE: ESSAY. Write at least 5 important descriptions that you can tell about the Features of a Computer Server.

_____

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Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title: OHSP In Preparing For Computer Assembly		
Learning Competency: Plan unit assembly to ensure OHS policies and procedures are followed in accordance with systems requirements. **LE_IACSS9-12ICCS-Ia-e-28** Enabling skills: Enumerate the OHS procedures while working with PC		
References : https://www.scribd.com/document/352040797/OHS-Policies-and-Guidelines-TESDA-CSS-NC2-COC1 https://ecosignsandbanners.com/product/safety-first-banner-2/		LAS No.: 1

CONCEPT NOTES

Personal Safety while working along with PC.

Computer equipment can be dangerous, and you or others can be injured or even killed if you don't follow proper safety guidelines when working along PC's. The following are some precautionary measures to take before working with any computer/equipment:

https://ecosignsandbanners.com/product/safety-first-banner-2/

The following are the OCCUPATIONAL HEALTH AND SAFETY PROCEDURES that you need to remember;

1. Always power off the computer and unplug the computer before working on it.
2. Take away any liquid near your working area to avoid getting electrocuted or accidentally damaging computer parts.
3. Always careful with tools that may cause short circuit.
4. Always ground or discharge yourself before touching any part of the computer.
5. Do not use excessive force if things don't quite slip into place.
6. Clean the area before and after using it to maintain sanitation and prevent accidents.
7. Hold the components on the edges and do not touch the Integrated Circuit (IC) parts.
8. Always wear personal protective equipment (PPE) in accordance with the organization's OHS procedures and practices.
9. Make sure that the pins are properly aligned when connecting a cable connector.
10. Contingency measures during workplace accidents, fire and other emergencies are recognized.

EXERCISE: ENUMERATION. Enumerate the OHS Procedures when working along with PC.

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2.
3.
4.
5.
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8.
9.
10.

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Network Operating System Features		
Learning Competency : Check normal server function in accordance with manufacturer's instructions (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38) Enabling Skills: Identify the NOS feature according to the given description.		
References : http://tiny.cc/qlyt9y http://tiny.cc/0dyt9y http://tiny.cc/wlyt9y		LAS No.:.2

CONCEPT NOTES:

Network Operating System (NOS) – is an operating system that "controls other software and hardware running on a network."

Examples: Windows Server 2008 R2, Novell Netware, Windows Server 2016, Linux

Features of the Network Operating System (NOS)

1. Security – This includes authorization and permission for access to the network, with specific control of features such as user management, log-on controls and passwords.

2. Networking – It allows for file, print and Internet connections and manages connective systems for local and wide area networks (LANs and WANs).

3. Administrative Interface – It allows a network administrator to monitor and maintain the system such as:

- formatting hard drives
- setting up security protocols for both the system and individual users
- configure security and data backup requirements for individual computers or the network as a whole

4. Basic Operating System Features – These include protocol support processor support, hardware detection and multiprocessing support for applications.

Exercises: IDENTIFICATION. Identify the NOS feature according to the given description.

_____1. It manages connective systems for LAN and WAN.

_____2. It includes protocol support, multiprocessing support for applications.

_____3. It allows the network administrator to set up security protocols for both the system and individual users.

_____4. This includes authorization and permission for access to the network.

_____5. It allows the Administrator to format hard drives.

Image URLs: http://tiny.cc/21xt9y http://tiny.cc/3myt9y http://tiny.cc/klyt9y http://tiny.cc/5q4v9y

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title: Materials Necessary For Computer Assembly.		
Learning Competency: Identify materials necessary to complete the work in accordance with established procedures and check against system requirements. **LE_IACSS9-12ICCS-Ia-e-28**		
References : https://www.instructables.com/id/How-To-Assemble-A-Basic-Desktop-PC/ https://www.amazon.com/Belkin-RJ45-Plug-Pack-R6G088-50/dp/B000A6LDOQ		LAS No.: 2

CONCEPT NOTES

What is a Computer?

A computer is a machine or device that performs processes, calculations and operations based on instructions provided by a software or hardware program. It is designed to execute applications and provides a variety of solutions by combining integrated hardware and software components.

The following are necessary materials to complete the work in accordance with established procedures and check against system requirements.

- **Software application**

  Software -this is a program and data that a computers uses.
- **Network OS software**

  Network – are multiple computers linked together to make simultaneous information sharing and exchange by multiple user.

. **RJ 45** – Registered jack is a type of connector commonly used for Ethernet networking.

https://www.amazon.com/Belkin-RJ45-Plug-Pack-R6G088-50/dp/B000A6LDOQ

- **UTP CAT 5e cable** – untwisted pair category 5 cables for computer networks.
- **Motherboard's manual and installer** - a guide and information about the motherboard.
- **Sound device driver** – is a driver that configure the system's sound card.

EXERCISE: IDENTIFICATION. Identify the materials needed to assemble a computer.

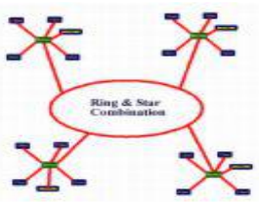
_____1. This is a guide and information about the motherboard.
_____2. This is a type of connector commonly used for Ethernet networking.
_____3. This is a program and data that a computers uses.
_____4. These are multiple computers linked together.
_____5. This is a driver that configures the system's sound card.

DepED DEPARTMENT OF EDUCATION
K TO 12 PROGRAM

SHARED OPTIONS
SENIOR HIGH ALTERNATIVE RESPONSIVE EDUCATION DELIVERY
GRADE 11 DLP LEARNING ACTIVITY SHEET

Name:	Date:	Score:
Subject : CSS - COMPUTER SYSTEMS SERVICING		
Lesson Title : Computer Network Concepts		
Lesson Competency : **Plan cable routes in accordance with network design and actual installation site. (TLE_IACSS9- 12SUCN-IVa-j-33)** Enabling Skills: Enumerate the Shared Hardware Component.		
References : https://www.techopedia.com/definition/25597/computer-network		LAS No.: 2.1

CONCEPT NOTES



What is a Computer Network?

A **computer network** is an interconnected group of computers. **Computer Network** In general, the term **network** can refer to any interconnected group or system. More specifically, a network is any method of sharing information between two systems (human or mechanical).

BENEFITS OF SHARING INFORMATION VIA NETWORK

In addition to reducing hardware costs by sharing expensive printers and other peripherals among multiple users, networks provide additional benefits to the users.

- **Software and Data Files** can be shared for access by multiple users
- **Electronic Mail (email)** can be sent and received
- **Collaboration Features** allow contributions by multiple users to a single document
- **Remote-Control Programs** can be used to troubleshoot problems or show new users how to perform a task

SHARED HARDWARE COMPONENTS Virtually any storage or output device can be shared over a network, but the most common devices to be used over a network include:

1. Printers
2. Disk drives
3. CD-ROM and optical drives
4. Modems
5. Fax
6. Tape backup units

EXERCISES A: **FILL IN THE BLANK**. Fill in each blank with its correct answer.

_____ 1. It is an interconnected group of computers.

_____ 2. It refers to any interconnected group or system.

EXERCISES B. ENUMERATION: Enumerate the different Shared Hardware Components:

1._____2._____3._____4._____5._____6._____

EXERCISE C. ESSAY. Answer the statement as briefly as you can.

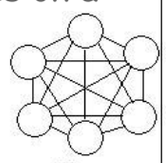
Cite specific situation/scenario where the sharing of information via network could benefit the user in any way possible.

_____
_____
_____
_____.

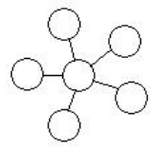
Name:	Date:	Score:
Subject : CSS – COMPUTER SYSTEMS SERVICING		
Lesson Title : Computer Network Concepts – Network Topology		
Lesson Competency : **Determine cable routes in accordance with network design and actual installation site.(TLE_IACSS9- 12SUCN-IVa-j-33)** Enabling Skills: Identify the type of Network topology		
References : https://www.techopedia.com/definition/25597/computer-network https://www.webopedia.com/quick_ref/topologies.asp		LAS No.:2.2

CONCEPT NOTES

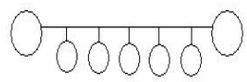
Network Topology refers to the layout of a network and how different nodes in a network are connected to each other and how they communicate. Topologies are either physical (the physical layout of devices on a network) or logical (the way that the signals act on the network media.)



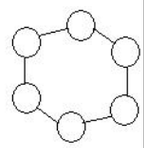
1. Mesh Topology: devices are connected with many redundant interconnections between network nodes. In a true mesh topology every node has a connection to every other node in the network.



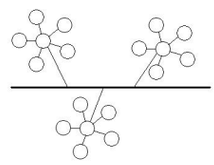
2. Star Topology: devices are connected to a central computer, called a hub. Nodes communicate across the network by passing data through the hub.



3.Bus Topology: This is often used to describe the main network connections composing the Internet. Bus networks are relatively inexpensive and easy to install for small networks. Ethernet systems use a bus topology.



4. Ring Topology: all of the nodes are connected in a closed loop. Messages travel around the ring, with each node reading those messages addressed to it.



5. Tree Topology: This is a "hybrid" topology that combines characteristics of linear bus and star topologies. In a tree network, groups of star-configured networks are connected to a linear bus backbone cable.

EXERCISE: IDENTIFICATION. Identify what type of Network Topology is being referred to in each of the given item. Write the correct answer on the space provided.

_____1. These are devices which are connected with many redundant interconnections between network nodes.

_____2. These are devices which are connected to a central computer, called a hub.

_____3. This is often used to describe the main network connections composing the Internet.

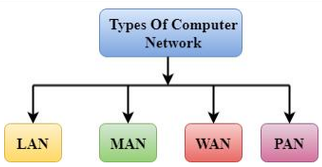
_____4. All of the nodes are connected in a closed loop.

_____5. This is a "hybrid" topology that combines characteristics of linear bus and star topologies.

Name:	Date:	Score:
Subject : CSS – COMPUTER SYSTEMS SERVICING		
Lesson Title : Types Of Computer Network		
Lesson Competency : **Determine cable routes in accordance with network design and actual installation site.(TLE_IACSS9- 12SUCN-IVa-j-33)** Enabling Skills: Enumerate the Types of Computer Network		
References : https://www.javatpoint.com/types-of-computer-network		LAS No.:2.3

CONCEPT NOTES

Computer Network Types



A computer network is a group of computers linked to each other that enables the computer to communicate with another computer and share their resources, data, and applications. A computer network can be categorized by their size.

A **computer network** is mainly of **four types**:

- LAN(Local Area Network)
- PAN(Personal Area Network)
- MAN(Metropolitan Area Network)
- WAN(Wide Area Network)

LAN(Local Area Network)

- Local Area Network is a group of computers connected to each other in a small area such as building,

PAN(Personal Area Network)

- Personal Area Network is a network arranged within an individual person, typically within a range of 10 meters.

There are two types of Personal Area Network:

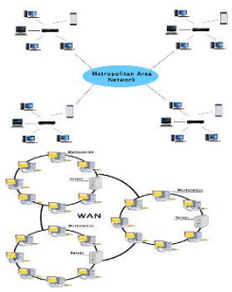
- Wired Personal Area Network
- Wireless Personal Area Network

Wireless Personal Area Network: Wireless Personal Area Network is developed by simply using wireless technologies such as WiFi, Bluetooth. It is a low range network.

Wired Personal Area Network: Wired Personal Area Network is created by using the USB.

MAN(Metropolitan Area Network)

- A metropolitan area network is a network that covers a larger geographic area by interconnecting a different LAN to form a larger network.



WAN(Wide Area Network)

- A Wide Area Network is a network that extends over a large geographical area such as states or countries.

EXERCISE: ENUMERATION. Enumerate the four types of Computer Network.

1._____
2._____
3._____
4._____

EXERCISES: ESSAY. Answer the question as briefly as you can.

As a student, what good would it do to you to know the types of Computer Network?

_____

_____

Name:	Date:	Score:
Subject : CSS – COMPUTER SYSTEMS SERVICING		
Lesson Title : Technologies In Computer Network		
Lesson Competency : Identify the necessary network materials in accordance with established procedures and check against system requirement. (**TLE_IACSS9- 12SUCN-IVa-j-33**)		
References : https://www.javatpoint.com/types-of-computer-network		LAS No.:2.4

CONCEPT NOTES

TECHNOLOGIES IN COMPUTER NETWORK

MODEM- connects the source of your Internet from your ISP and your home network, whether you use a cable provider or dial-up phone connection. The modem connects to your router–or directly to your computer–using an Ethernet cable.

ROUTER -Network device that join multiple computer networks together via either wired or wireless connections.

ETHERNET CABLE-*A* cable use to connect your computer and network devices.

REPEATER -Network device used to regenerate or replicate a signal. It extends the coverage area of your WiFi network.

HOW IT WORKS

You're using your computer accessing the internet. Your computer will gather data and information via digital signals *(computer data) through Ethernet cable.*

Modem Router is provided by your chosen Internet Service Provider (ISP) for you to access and connect with the Internet.

EXCERCISE: IDENTIFICATION. Identify what type of Network Topology is being referred to in each of the given item. Write the correct answer on the space provided before each number.

_____1. It connects the source of your Internet from your ISP and your home network.

_____2. The Network device that joins multiple computer networks together.

_____3. A cable use to connect your computer and network devices.

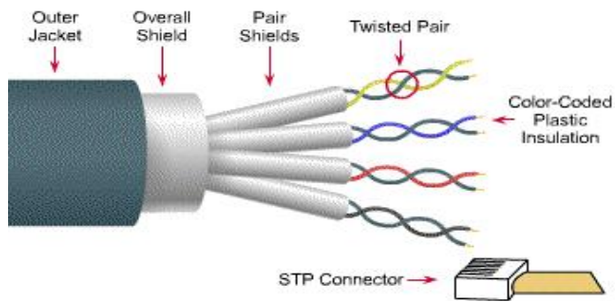
_____4. A Network device used to regenerate or replicate a signal. It extends the coverage area of your WiFi network.

Name:	Date:	Score:
Subject : CSS (Computer Systems Servicing)		
Lesson Title : Network Media And Protocol		
Lesson Competency: Identify the necessary network materials in accordance with established procedures and check against system requirement. (**TLE_IACSS9- 12SUCN-IVa-j-33**) Enabling Skills: Identify the different parts of Ethernet cable.		
References : https://www.javatpoint.com/types-of-computer-network		LAS No.:2.5

CONCEPT NOTES

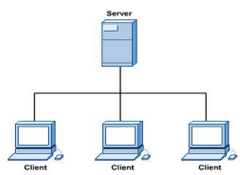
NETWORKING MEDIA

Networking media can be defined simply as the means by which signals(data) are sent from one computer to another (either by cable or wireless means).



INSIDE THE ETHERNET CABLE

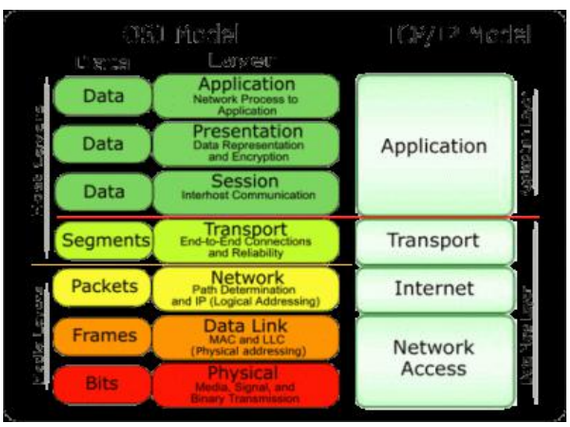
CLIENT AND SERVER



In a client/server network arrangement, network services are located in a dedicated computer whose only function is to respond to the requests of clients. The server contains the file, print, application, security, and other services in a central computer that is continuously available to respond to client requests.

NETWORKING PROTOCOL (TCP/IP)

Network protocols are formal standards and policies comprised of rules, procedures and formats that define communication between two or more devices over a network. Network protocols govern the end-to- end processes of timely, secure and managed data or network communication.

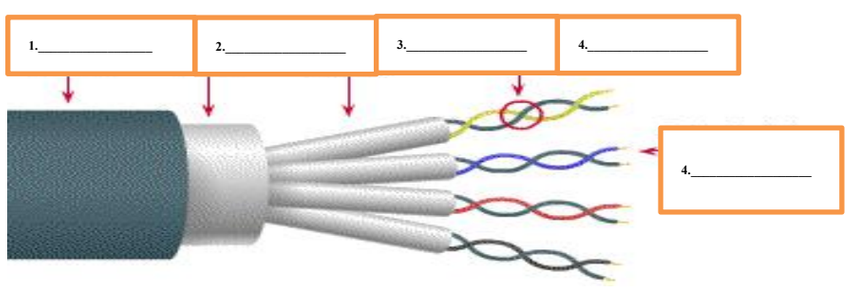


PROTOCOL CONCEPTS

- Set of rules
- What do you want to do? (Application)
- Where are you going? (Addressing)
- How do you get there? (Media Types)
- Did you get there? (Error Checking)

Computer Networking Models: Models, also called protocol stacks, represented in layers, help to understand where things go right or wrong.

EXERCISE: IDENTIFICATION.
Label the different parts of the Ethernet Cable; Write your answer on the specified number inside the box.



GRADE 11 DLP LEARNING ACTIVITY SHEET

Name:	Date:	Score:
Subject : CSS (Computer Systems Servicing)		
Lesson Title : Structured Cabling System		
Lesson Competency: Obtained the necessary network materials in accordance with established procedures and check against system requirement. (**TLE_IACSS9- 12SUCN-IVa-j-33**) Enabling Skills: Identify the types of LAN cable.		
References : https://www.ppc-online.com		LAS No.:2.6

CONCEPT NOTES

Study the Structured Cabling System Terminologies below:

TC –Thin Copper
•AL –Aluminum
•ANSI –American National Standard Institute
•TIA –Telecommunication Industry Association
•EIA –Electronic Industry Association
•ISO –International Organization for Standardization
•Network Topology –Infrastructure of computer network
•Ethernet Cable –Cable use to connect your computer to the network.

WHAT IS NETWORK CABLING

Cable is the medium through which information usually moves from one network device to another. There are several types of cable which are commonly used with LANS.

LAN CABLE TYPES:

Coaxial cable is commonly used by cable operators, telephone companies, and internet providers around the world to convey data, video, and voice communications to customers. It has also been used extensively within homes.

Twisted pair cabling comes in two varieties: shielded and unshielded. Unshielded twisted pair (UTP) is the most popular and is generally the best option for school networks

Fiber optic cabling consists of a **center glass core** surrounded by several layers of protective materials.

EXERCISE: IDENTIFICATION. Identify what is referred to in each of the given item. Write the correct answer on the space provided before each number.

_____**1.** This is commonly used by cable operators, telephone companies, and internet providers around the world.

_____2. It comes in two varieties: Shielded and Unshielded.

GRADE 11 DLP LEARNING ACTIVITY SHEET

Name:	Date:	Score:
Subject : CSS (Computer Systems Servicing)		
Lesson Title : Structured Cabling System		
Lesson Competency: Obtained the necessary network materials in accordance with established procedures and check against system requirement. (**TLE_IACSS9- 12SUCN-IVa-j-33**) Enabling Skills: Identify the types of LAN cable.		
References : https://www.ppc-online.com		LAS No.:2.6

_____3. A cabling that consists of a center glass core surrounded by several layers of protective materials.

Name:	Date:	Score:
Subject : CSS (Computer Systems Servicing)		
Lesson Title : Tools And Equipment In Computer Networking		
Lesson Competency : **Check the network connectivity of each terminal in accordance with network design TLE_IACSS9-12SUCN-Ia-e-34** Enabling Skills: Identify the types of Network Cabling		
References : https://www.javatpoint.com/types-of-computer-network		LAS No.:2.7

CONCEPT NOTES

TOOLS AND EQUIPMENT IN COMPUTER NETWORKING

RJ45 is a type of connector commonly used for Ethernet networking. The "RJ" in RJ45 stands for "registered jack," since it is a standardized networking interface. The "45" simply refers to the number of the interface standard.

TWISTED PAIR CABLE A twisted pair cable is a type of cable made by putting two separate insulated wires together in a twisted pattern and running them parallel to each other. This type of cable is widely used in different kinds of data and voice infrastructures.

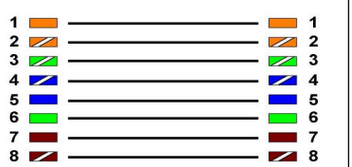
CRIMPING TOOL -A device used to conjoin two pieces of metal by deforming one or both of them in a way that causes them to hold each other. The result of the tool's work is called a **crimp**.

NETWORK TESTER -a device that is used to test the strength and connectivity of a particular type of cable or other wired assemblies. A cable tester can test whether a cable or wire is setup properly.

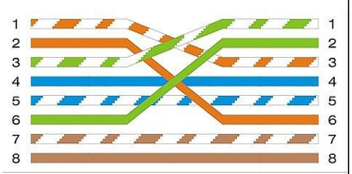
ETHERNET CABLING STANDARDS

There are two network cabling standards in computer networking:
T568A wiring pattern is recognized as the preferred wiring pattern.
T568B standard matches the older AT&T 258A color code and was the most widely used wiring scheme.

TYPES OF NETWORK CABLING

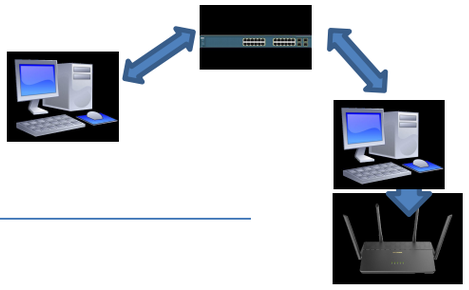


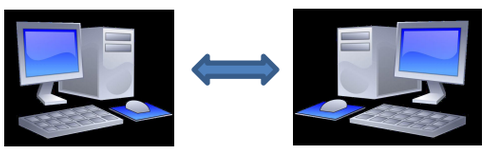
STRAIGHT THROUGH CABLE Is a type of CAT5 which the RJ-45 connectors at each end have the same pin out. *(color code use on both ends are the same)* Use to connect computer to network switch/hub or router.



CROSSOVER CABLE is a type of CAT where one end is T568A configuration and the other as T568B configuration. Pin 1 is crossed with Pin 3 and Pin 2 is crossed with Pin 6. Computer to Computer with no switch or hub.

EXCERCISE: IDENTIFICATION. Identify the type of Network Cabling to be used for each setup.
Write the correct answer on the space provided.





_____

_____

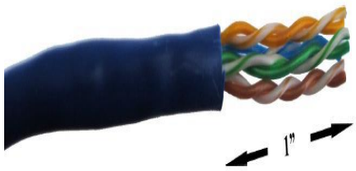
Name:	Date:	Score:
Subject : CSS – COMPUTER SYSTEMS SERVICING		
Lesson Title : Crimping RJ45		
Lesson Competency : **Check the network connectivity of each terminal in accordance with network design TLE_IACSS9-12SUCN-Ia-e-34**		
Enabling Skills: Enumerate the steps in crimping the connector (RJ-45) to a CAT(e) cable.		
References : https://www.javatpoint.com/types-of-computer-network		LAS No.:2.8

CONCEPT NOTES

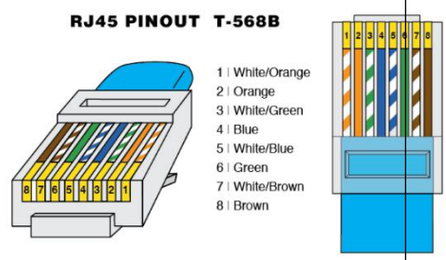
CRIMPING RJ45

This lesson will explain crimping the connector (RJ-45) to a CAT(e) cable. This can be done with one simple to use tool known as RJ-45 crimping tool.

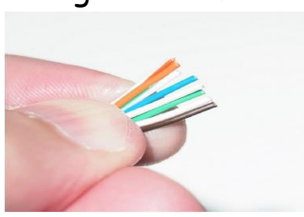
STEP 1: **Outer Sheathe Stripping**



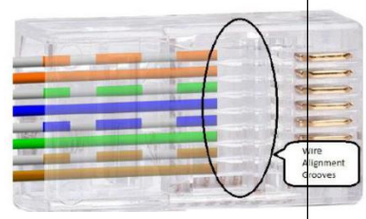
After cutting the cable to proper length, the first step is to unsheathe the cable. Using the stripper on your crimping tool, strip the cable back 1" (inch) from the end. Insert the cable into the stripper portion of the crimping tool and squeeze it tight. While squeezed, rotate the crimp tool around the cable a full 360°. Pull away and the sheathing will come off. (NOTE: *Do not cut the twisted pair wires under the outer sheathe. This may result in a decrease in or no data transfer.)*



STEP 2: **Wire Untwisting and 568B Scheme Arrangement**
After stripping the wire, the next step is to untwist the smaller wires and arrange them into the proper wiring scheme for the RJ-45 connector. The recommended scheme for the wiring is 568B.

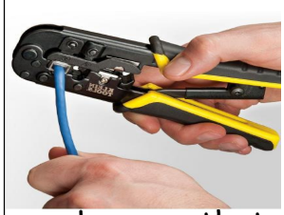


STEP 3: **Wire Preparation for RJ-45 Connector**
Once the wire is arranged to the 568B scheme, it needs to be cut down to fit in the connector. This is easily done with the cutting tool on the 3-in-1 crimping tool. Bring the wires tighter together and cut them down, in an even line, to ½" (inch) from the cut of the sheathing.



STEP 4: **Inserting Wires into RJ-45 Connect**
With the wires cut to proper length for the RJ-45 connector, the wires are ready to be inserted into the connector. With the RJ-45 connector facing up (securing clip on the UNDERSIDE),insert the wires into the connector. Each wire will fit into each of the eight grooves in the connector

STEP 5: **Crimping and Testing Proper Crimp**



Finally, the RJ-45 connector needs to be crimped onto the wire. When this happens, the eight pins (at the end of the connector) are pushed down into the wires below. Insert the connector into the Crimping portion of the crimping tool until the connector cannot go in any further. Squeeze the crimping tool very tightly and release. Squeeze the crimping tool a second time to make sure that all of the pins are pushed down on the connector. When crimping is complete, remove the wire (now with the connector crimped) from the tool and check the pins to make sure that they are all down. *If the pins are all crimped down, give the connector a slight tug to make sure that it is securely attached to the wire. Then you can check the pin connection by using network tester.*

EXERCISE: ENUMERATION. Enumerate the 5 steps in crimping the connector (RJ-45) to a CAT (e) cable.

1._____ 2._____ 3._____
4._____ 5. _____

Name:	Date:	Score:
Subject : CSS – COMPUTER SYSTEMS SERVICING		
Lesson Title: **Assembling An Ethernet Cross-Over And Straight-Through Cable**		
Lesson Competency : **Check the network connectivity of each terminal in accordance with network design TLE_IACSS9-12SUCN-Ia-e-34**		
Enabling Skills: Assembling an Ethernet cable		
References : http://www.groundcontrol.com/galileo/ch5-ethernet.htm		LAS No.:2.9

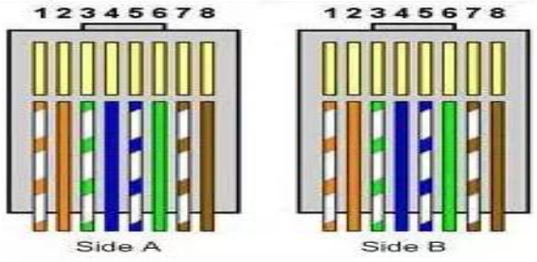
PERFORMANCE TASK

Assembling an Ethernet Cross-over and Straight-through Cable

In an Ethernet networking environment – like in a home or an office with multiple PCs that are wired – the computers need to be connected to a central router to allow data transfer.

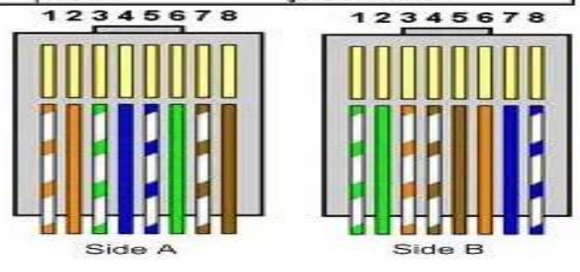
Straight Through

Pin ID	Side A	Side B
1	Orange-white	Orange-white
2	Orange	Orange
3	Green-white	Green-white
4	Blue	Blue
5	Blue-white	Blue-white
6	Green	Green
7	Brown-white	Brown-white
8	Brown	Brown



Cross Over

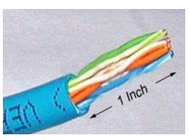
Pin ID	Side A	Side B
1	Orange-white	green-white
2	Orange	green
3	green-white	orange-white
4	blue	brown-white
5	blue-white	Brown
6	green	orange
7	brown-white	Blue
8	brown	blue-white

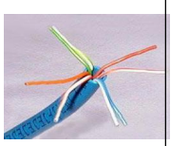


Materials to be used:

- Ethernet Cable Category 5e or Cat5e – standard wire for cabling
- RJ45 – crimpable connectors for Cat5e
- RJ45 Crimping tool
- Wire cutter, stripper or pliers
- Ethernet Cable tester

Reminder/ Caution: Be careful when using the tools.





1. Cut into the plastic sheath **1 inch** from the end of the cut cable.
2. Unwind and pair similar colors
3. Pinch(squeeze)the wires between your fingers and straighten.
4. Use wire cutter to make straight cut across the wires $\frac{1}{2}$ inch.
5. Push the wires into the connector.
6. Take view from the top. Make sure the wires are all the way in.

7. Crimping the Cable – carefully place the connector into the Ethernet Crimper and cinch down on the handles tightly. The copper splicing tabs on the connector will pierce into each of the eight wires.

8. For a standard "Straight-Through" cable, repeat all steps and wire color order on the other end of cable. For a cross-over cable - the other end will have a different color order.
9. Make sure to test the cables before installing them.

ormance 100

Rubrics points

CRITERIA	PERCENTAGE	POINTS
Accuracy	40%	
Adherence to the procedures	30%	
Workmanship-Applied safety procedures	10%	
Creativity	10%	
Speed	10%	
TOTAL	100%	

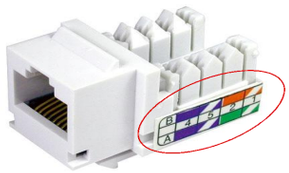
Name:	Date:	Score:
Subject : CSS – COMPUTER SYSTEMS SERVICING		
Lesson Title: **Terminating Modular Jack**		
Lesson Competency : **Carry out communication check between terminals in accordance with operating system network configuration guides TLE_IACSS9-12SUCN-Ia-e-34** **Enabling Skills: Terminating Modular Jack**		
References : http://www.groundcontrol.com/galileo/ch5-ethernet.htm		LAS No.:2.10

PERFORMANCE TASK

The following are the basic steps in TERMINATING MODULAR JACK that you can follow:

1. Strip the cable 2 to 3 inches using Wire Stripper.
2. Check the printed color codes inside/outside the modular jack
3. Position the wires based on the printed color codes.
4. Terminate the wires using Impact punch down tool

2



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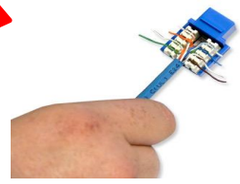

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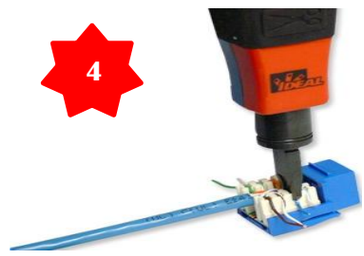


5. Prepare the Wallplate of the Modular Jack
6. Insert the jack in the Wallplate
7. Test the connection by:

a.) Get one (1) straight-through cable,
b.) Connect it to the cable tester and the other end of the straight-through cable connected to the modular jack,
c.) Connect the other end of the modular jack, which is RJ-45 to the other port of the cable tester as shown in the picture below,
d.) Begin the test.

5

6

7

Name:	Date:	Score:
Subject : CSS – COMPUTER SYSTEMS SERVICING		
Lesson Title: **Terminating Modular Jack**		
Lesson Competency : **Carry out communication check between terminals in accordance with operating system network configuration guides TLE_IACSS9-12SUCN-Ia-e-34** **Enabling Skills: Terminating Modular Jack**		
References : http://www.groundcontrol.com/galileo/ch5-ethernet.htm		LAS No.:2.10

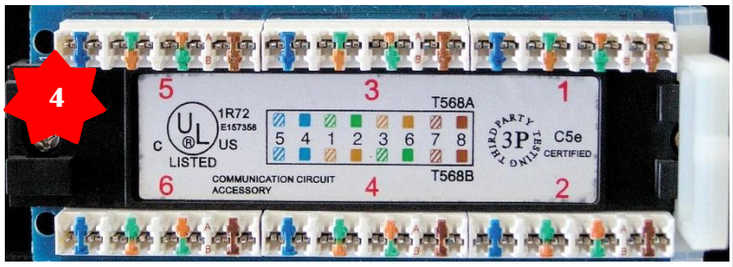
Performance Rubrics 100 points for for Terminating Modular Jack

CRITERIA	PERCENTAGE	POINTS
Accuracy	40%	
Adherence to the procedures	30%	
Workmanship-Applied safety procedures	10%	
Creativity	10%	
Speed	10%	
	100%	

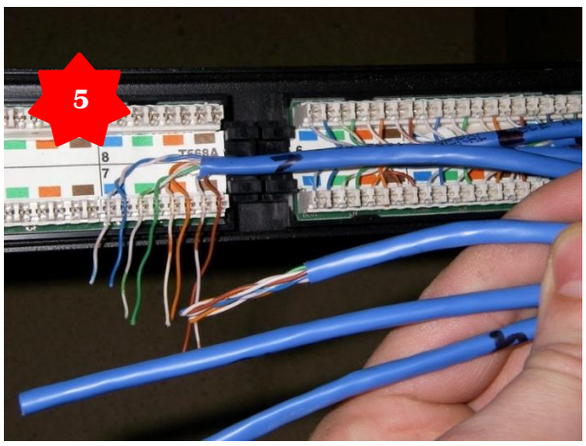
Name:	Date:	Score:
Subject : CSS – COMPUTER SYSTEMS SERVICING		
Lesson Title: **Terminating Patch Panel**		
Lesson Competency : **Carry out communication check between terminals in accordance with operating system network configuration guides TLE_IACSS9-12SUCN-Ia-e-34**		
References : http://www.groundcontrol.com/galileo/ch5-ethernet.htm		LAS No.:2.11

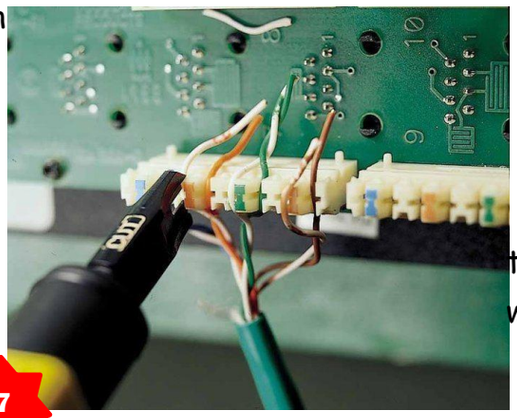
PERFORMANCE TASK

PATCH PANEL SET-UP - TERMINATING PATCH PANEL



1. Determine the length of the cable base on position or location.
2. Strip the cable 3 – 4 inches.
3. Un-twist the wires completely.
4. Check the printed color codes inside the patch panel.
5. Sort the wires in its proper position.
6. Choose a port on the patch panel before terminating.
7. Begin terminating each wire.





8. Test the connection

*(**Note**: Test the patch panel like the modular jack above; just replace the jack with patch panel)*

Performance Rubrics 100 points for Terminating Patch Panel

CRITERIA	PERCENTAGE	POINTS
Accuracy	40%	
Adherence to the procedures	30%	
Workmanship-Applied safety procedures	10%	
Creativity	10%	
Speed	10%	
	100%	

SHARED OPTIONS
SENIOR HIGH ALTERNATIVE RESPONSIVE EDUCATION DELIVERY
GRADE 11 DLP LEARNING ACTIVITY SHEET

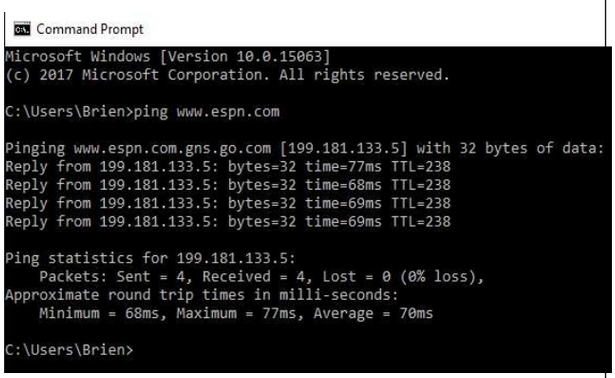
Name:	Date:	Score:
Subject : CSS (COMPUTER SYSTEMS SERVICING)		
Lesson Title: **DOS Command Networking**		
Lesson Competency : **Carry out communication check between terminals in accordance with operating system network configuration guides TLE_IACSS9-12SUCN-Ia-e-34**		
Enabling Skills: Identify the correct DOS Command		
References : http://support.seagate.com/rightnow/Flash/central_axis/IPCommands.pdf		LAS No.:2.12

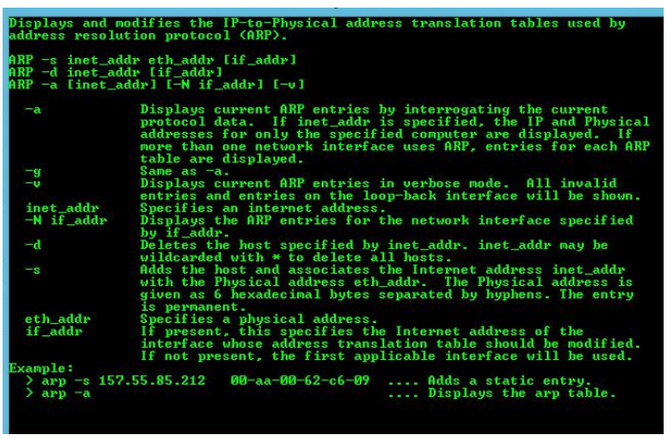
CONCEPT NOTES

DOS COMMAND PROGRAM USED IN COMPUTER NETWORKING

PING

Most widely use DOS command but less essential. Ping is used to test the ability of one network host to communicate with another. Simply enter the Ping command, followed by the name or the IP address of the **destination** host. Assuming that there are no network problems or firewalls preventing the ping from completing, the remote host will respond to the ping with four packets.



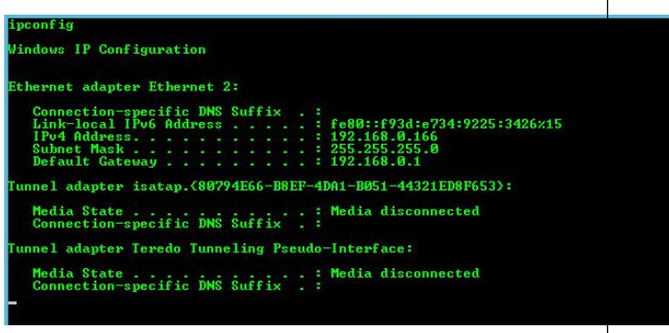


ARP

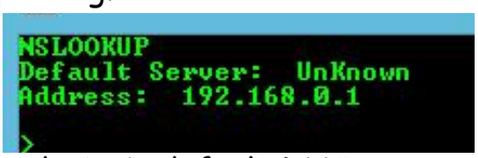
The ARP command corresponds to the Address Resolution Protocol. Although it is easy to think of network communications in terms of IP addressing, packet delivery is ultimately dependent on the Media Access Control (MAC) address of the device's network adapter. This is where the Address Resolution Protocol comes into play. Its job is to map IP addresses to MAC addresses.

IP CONFIG

the IPConfig command will display basic IP address configuration information for the device. Simply type IPConfig at the Windows command prompt, and you will be presented with the IP address, subnet mask, and Default gateway that the device is currently using.



NSLookup



NSLookup is a great utility for diagnosing DNS name resolution problems. Just type the NSLookup command, and Windows will display the name and IP address of the device's default DNS server. From there, you can type host names in an effort to see if the DNS server is able to resolve the specified host name. those provided by Ping or Tracert.

EXERCISE: IDENTIFICATION Identify the correct DOS COMMAND to be used in computer networking. Write the correct answer on the space provided.

_____1. It is used to test the ability of one network host to communicate with another.

_____2. This corresponds to the Address Resolution Protocol.

_____3. It is a command to display the basic IP address configuration information.

_____4. It is a great utility for diagnosing DNS name resolution problems.

Name:	Date:	Score:
Subject : CSS (COMPUTER SYSTEMS SERVICING)		
Lesson Title: **IP Networking Command**		
Lesson Competency : **Carry out communication check between terminals in accordance with operating system network configuration guides TLE_IACSS9-12SUCN-Ia-e-34** **Enabling Skills: Identify the correct Network Command**		
References : http://support.seagate.com/rightnow/Flash/central_axis/IPCommands.pdf		LAS No.:2.13

CONCEPT NOTES

IP Networking Command

arp –a: is short for address resolution protocol, it will show the IP address of your computer along with the IP address and MAC address of your router.

hostname: This is the simplest of all TCP/IP commands. It simply displays the name of your computer.

ipconfig: The ipconfig command displays information about the host (the computer your sitting at) computer TCP/IP configuration.

ipconfig /all: This command displays detailed configuration information about your TCP/IP connection including Router, Gateway, DNS, DHCP, and type of Ethernet adapter in your system.

ipconfig /renew: Using this command will renew all your IP addresses that you are currently (leasing) borrowing from the DHCP server. This command is a quick problem solver if you are having connection issues.

ipconifg /release: This command allows you to drop the IP lease from the DHCP server.

ipconfig /flushdns: This command is only needed if you're having trouble with your networks DNS configuration.

nbtstat –a: This command helps solve problems with NetBIOS name resolution. (Nbt stands for NetBIOS over TCP/IP)

netstat: Netstat displays a variety of statistics about a computers active TCP/IP connections. This tool is most useful when you're having trouble with TCP/IP applications such as HTTP, and FTP.

nslookup: Nslookup is used for diagnosing DNS problems. If you can access a resource by specifying an IP address but not it's DNS you have a DNS problem.

pathping: Pathping is unique to Window's, and is basically a combination of the Ping and Tracert commands. Pathping traces the route to the destination address then launches a 25 second test of each router along the way, gathering statistics on the rate of data loss along each hop.

ping: Ping is used to test the ability of one network host to communicate with another.

route: The route command displays the computers routing table. A typical computer, with a single network interface, connected to a LAN.

tracert: The tracert command displays a list of all the routers that a packet has to go through to get from the computer where tracert is run to any other computer on the internet.

EXERCISES: IDENTIFICATION. Identity what type of IP NETWORK COMMAND is being referred to in each of the given item. Write the correct answer on the space provided before each number.

_____1. Displays a list of all the routers that a packet has to go through to get from the computer.

_____2. The command that helps solve problems with NetBIOS name resolution.

_____3. This command allows you to drop the IP lease from the DHCP Server.

_____4. It shows the IP address of your computer along with the IP Address and MAC address of your router.

_____5. Displays a variety of statistics about a computers active TCP/IP Connections

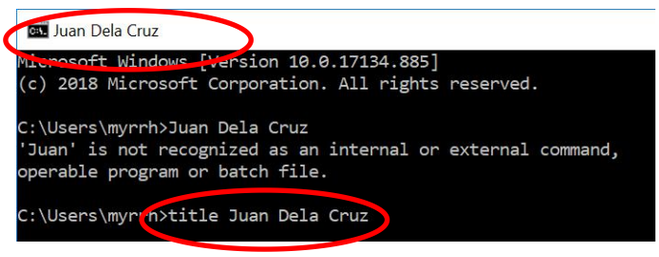
SHARED OPTIONS
SENIOR HIGH ALTERNATIVE RESPONSIVE EDUCATION DELIVERY
GRADE 11 DLP LEARNING ACTIVITY SHEET

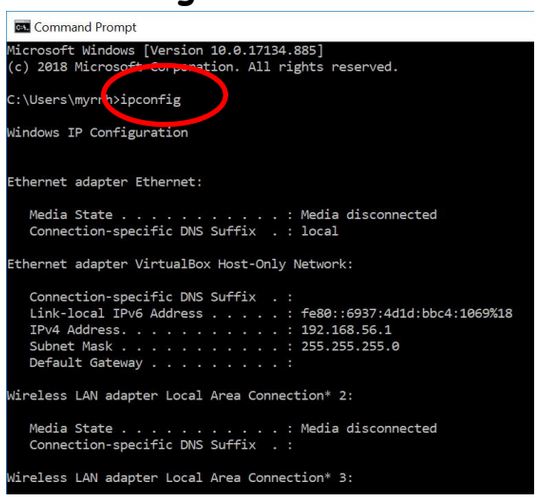
Name:	Date:	Score:
Subject : CSS (COMPUTER SYSTEMS SERVICING)		
Lesson Title: **IP Networking Command**		
Lesson Competency : **Carry out communication check between terminals in accordance with operating system network configuration guides TLE_IACSS9-12SUCN-Ia-e-34**		
References : http://support.seagate.com/rightnow/Flash/central_axis/IPCommands.pdf		LAS No.:2.14

PERFORMANCE TASK

The following are steps to follow for the IP Networking Command

1. Click on Start search icon and type CMD and hit the enter key
2. Type IPCONFIG then hit enter
3. You will see the different properties of your Ethernet Adapter configuration.
4. Type TITLE space your FULL NAME then ENTER
5. This will include your name in your cmd





window

6. PRINT SCREEN then save it as IPCONFIG
7. Type IPCONFIG/ALL, this will show all your current IP information in all adapters. PRINT SCREEN then save it as IPCONFIG/ALL
8. Type IPCONFIG/RENEW, this will renew your IP address if set to obtain IP automatically. PRINT SCREEN then save it as IPCONFIG /RENEW.
9. Type IPCONFIG/displaydns, this will show your current DNS resolver cache logs. PRINT SCREEN then save it as IPCONFIG/displaydns.

10. Now we will use the PING commands.
    Type PING + GATEWAY ADDRESS (xxx.xxx.xxx.xxx)

11. PRINT SCREEN then save your work as Ping.

Performance Rubrics – 100 points
IP NETWORKING COMMANDS

CRITERIA	PERCENTAGE	POINTS
Accuracy	40%	
Adherence to the procedures	30%	
Workmanship-Applied Safety Procedures	10%	
Creativity	10%	
Speed	10%	
	100%	

SHARED OPTION

DepED DEPARTMENT OF EDUCATION K TO 12 PROGRAM

SENIOR HIGH ALTERNATIVE RESPONSIVE EDUCATION DELIVERY
GRADE 11 DLP LEARNING ACTIVITY SHEET

Name:	Date:	Score:
SUBJECT : CSS (COMPUTER SYSTEMS SERVICING)		
Lesson Title: **Ip Addressing**		
Lesson Competency : **Carry out communication check between terminals in accordance with operating system network configuration guides TLE_IACSS9-12SUCN-Ia-e-34** **Enabling Skills: Identify the IP Classes**		
References : https://www.slideshare.net/adkpcte/ip-address		LAS No.:2.15

CONCEPT NOTES

IP ADDRESSING

IP ADDRESS An IP address is a 32 bit number, written in 4 parts like 11000000.10101000.00000001.00000001 in binary form and 192.168.1.1 in decimal form This way it is easier to understand. Now, a unique number is sufficient to identify each host in a network but that alone cannot help in reaching from one host to another.

- Two Standards of IP address –

❑IPv4 – 32 bit binary bits
- 4 numbers separated by dots.
- Example - 25.161.13.191

❑IPv6 – 128 bit binary bits
- eight groups of hexadecimal numbers separated by colons(:).
- Example - 2001:0db8:85a3:0000:0000:8a2e:0370:7334

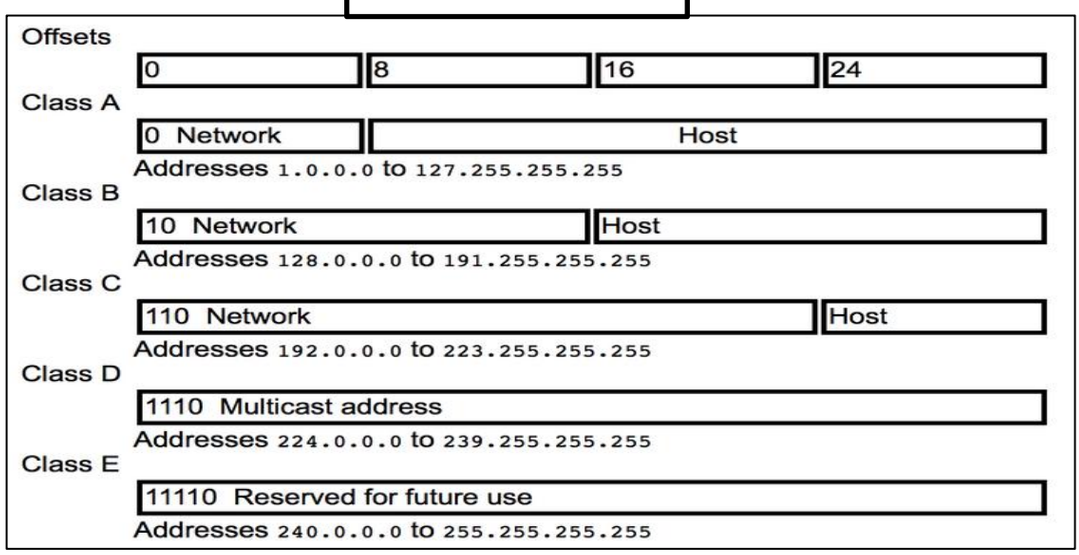
IP Address classes –

Class	Class Range	Address Range	Supports
Class A	0-126	10.0.0.0 to 10.255.255.255	16 million hosts on each of 127 networks.
Class B	128-191	172.16.0.0 to 172.31.255.255	65,000 hosts on each of 16,000 networks.
Class C	192-223	192.168.0.0 to 192.168.255.255	254 hosts on each of 2 million networks.
Class D	224-239	NA	Reserved for Multicasting
Class E	240-255	NA	Experimental; used for research

SUBNET MASK "Subnet" means sub-network. So the purpose of subnet mask was to create another partition (3rdpart) in an

- **Subnet mask**
  - Indicates how much of the IP address represents the network or subnet
- Standard (default) subnet masks:
  - Class A subnet mask is 255.0.0.0
  - Class B subnet mask is 255.255.0.0
  - Class C subnet mask is 255.255.255.0

IP ADDRESS FORMAT



EXERCISE: Find the class, network and host addresses for each IP address.

		CLASS	NETWORK	HOST
1	4.23.145.90			
2	227.34.78.7			

Name:	Date:	Score:
SUBJECT : CSS (COMPUTER SYSTEMS SERVICING)		
Lesson Title: **Ip Addressing**		
Lesson Competency : **Carry out communication check between terminals in accordance with operating system network configuration guides TLE_IACSS9-12SUCN-Ia-e-34** **Enabling Skills: Identify the IP Classes**		
References : https://www.slideshare.net/adkpcte/ip-address		LAS No.:2.15

3	246.7.3.8			
4	129.6.8.4			
5	198.76.9.23			

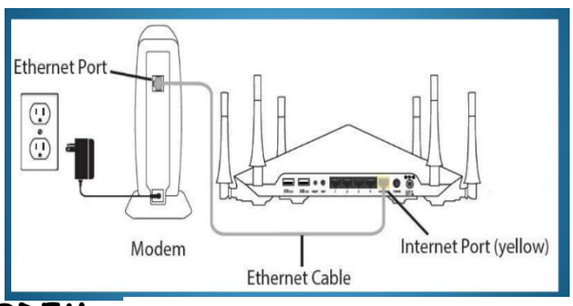
SHARED OPTIONS
SENIOR HIGH ALTERNATIVE RESPONSIVE EDUCATION DELIVERY
GRADE 11 DLP LEARNING ACTIVITY SHEET

Name:	Date:	Score:
Subject : CSS (COMPUTER SYSTEMS SERVICING)		
Lesson Title: **Wireless Settings Configuration**		
Lesson Competency : **Configure client device systems settings in accordance with manufacturer's instruction and user end preference. TLE_IACSS9-12SUCN-If-j-IIa-e-35** **Enabling Skills: Identify the parts in setting up the Router and modem**		
References : https://www.slideshare.net/StJannifer/how-to-set-up-and-install-netgear-wireless-router		LAS No.:2.16

CONCEPT NOTES

SETTING UP ROUTER

1. SETUP ROUTER

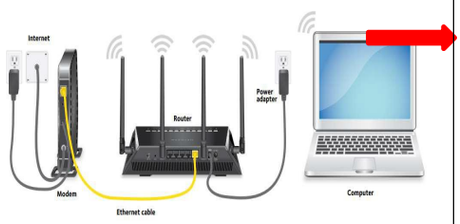


2. EXAMINE YOUR ROUTER

Most of the Router Contain A label on the back side of your Router. In this label, you can get DefaultAccess IP Address, Default Username, And Password

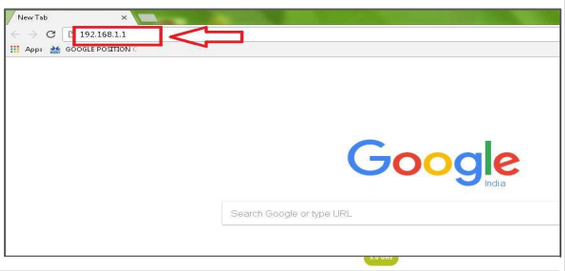
3. CONNECT MODEM AND ROUTER

Connect your Modem to the Internet Port of the Router and your Computer or Laptop to any of the Four LAN Ports.



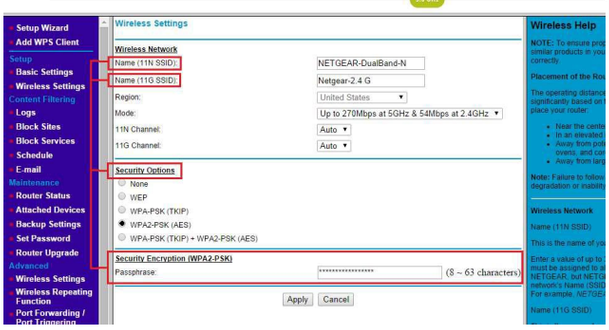
4. OPEN INTERNET BROWSER

Open Your Internet Browser Like Google Chrome,Microsoft Edge, Mozilla Firefox And At top of Your Browser Please Type in Url Box **192.168.1.1** And Press Enter.



ROUTER LOGIN PAGE

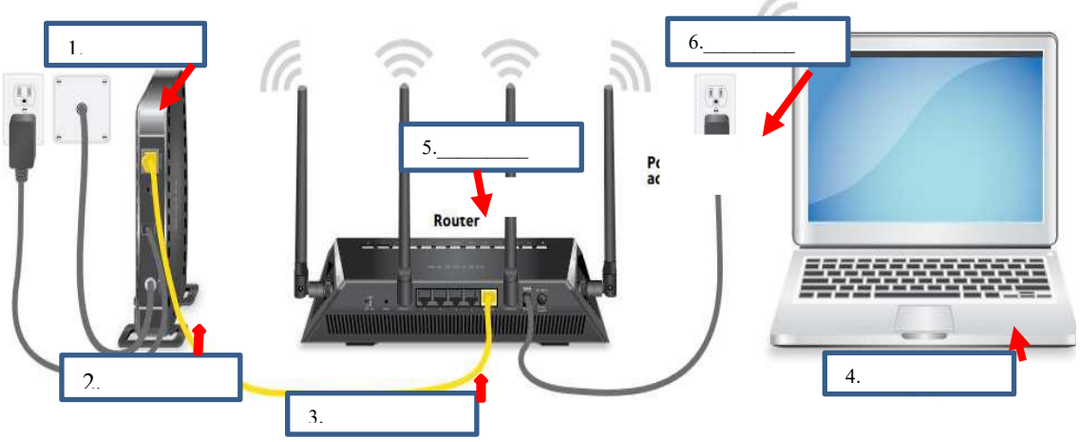
You will See a Small Windows Asking for Username and Password. Enter the default User name and Password. You can find the DEFAULT USERNAME & PASSWORD at the back side of the router. Try These Combinations :



Username – admin , Password = admin
Username – admin , Password = password

After hitting the enter you will Log into your router and modify settings as you desired.

EXERCISE:
Identification
Label the parts in properly setting up the router and modem.



Name:	Date:	Score:
Subject : CSS (COMPUTER SYSTEMS SERVICING)		
Lesson Title: **Router Configuration**		
Lesson Competency : : **Configure client device systems settings in accordance with manufacturer's instruction and user end preference. TLE_IACSS9-12SUCN-If-j-IIa-e-35**		
References : http: **http://cssncii.blogspot.com/**		LAS No.:2.17

PERFORMANCE TASK

ROUTER CONFIGURATION

Router Configuration

Note: *Configuring a router depends on the brand and model of the router this means that configuration screen may be different on each other BUT the basic functions are still there.*

A. Setting-up Wireless Configuration

1. **Open web browser** (Internet Explorer, Google Chrome, Firefox)
2. In the address bar **type the IP address** of the router(Ex. 192.168.1.1 or **192.168.0.1**)
3. Type the router administrator **username** and **password** (Ex. **admin**, **admin**)
4. in the router's **configuration screen**, look for **Basic Setup**
5. **Disable** DHCP Server
6. Change the **Time Zone** (Ex. **GMT+08:00** Singapore, Taiwan, Russia)
7. Click **save Settings** below
8. Click **Wireless Setup tab**
9. Click **Manual Setup**
10. Type the **SSID** of the Wi-Fi (Ex. **CSS_wifi**)
11. Click **Save**
12. Click **Wireless Security**
13. Click **WPA2 Personal** in security type.
14. Type the **passphrase** Wi-Fi password (**Warning:** Do not forget the Wi-Fi password.)
15. Click **Save**

B. MAC Filtering Configuration (Server)

1. **Open web browser** (Internet Explorer, Google Chrome, Firefox)
2. In the address bar **type the IP address of the router** (Ex. **192.168.1.1** or **192.168.0.1**)
3. Type the router administrator **username** and **password** (Ex. **admin**, **admin**) 4. In the router's **configuration screen**, look for **Wireless Setup tab**
5. Click **Wireless MAC Filtering**
   a. Get the MAC Address of your computer or laptop by: a. Windows + R or **Click Start choose Run**
   b. Type **cmd**
   c. Type **ipconfig /all**
   d. Locate the **Physical Address** (MAC Address) of the computer or laptop
   e. **Copy or write** it to a piece of paper
7. Type the MAC address of your computer in the **MAC address textbox**.
8. Choose if you want to **permit or prevent** the connection (allow or deny).
9. Click **Save**

Performance Rubrics -100 points for Router Configuration

CRITERIA	PERCENTAGE	POINTS
Accuracy	40%	
Adherence to the procedures	30%	
Workmanship-Applied safety procedures	10%	
Creativity	10%	
Speed	10%	
	100%	

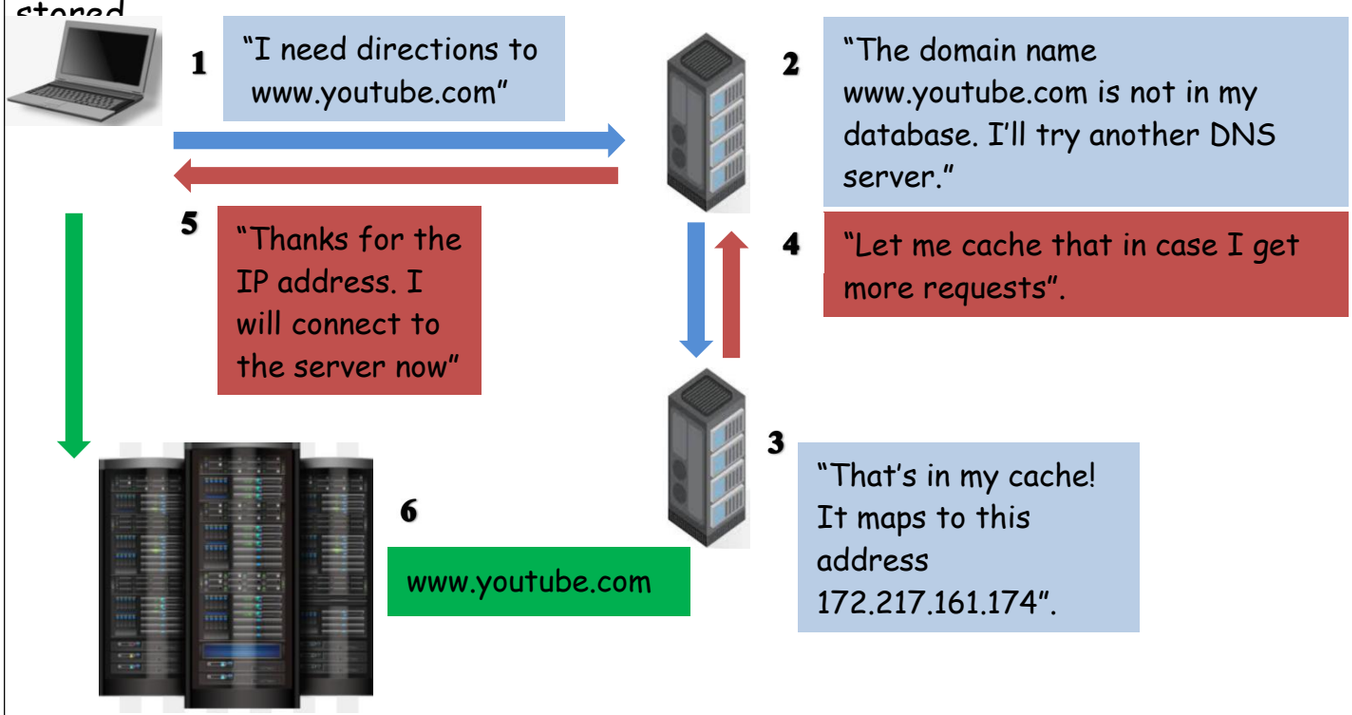
Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Domain Name System (DNS)		
Learning Competency : Install and update required modules/add-ons on NOS installation procedures (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38) Enabling Skills: Explain how Domain Name Systems works.		
References: http://tiny.cc/542v9y http://tiny.cc/j82v9y http://tiny.cc/i32v9y		LAS No.: 3

CONCEPT NOTES

- **Domain Name Systems (DNS)** is the "phonebook of the Internet".
- **DNS server** is a computer server that contains a database of public IP addresses and their associated hostnames, and in most cases serves to translate those names to IP addresses as requested.
- **DNS servers** run special software and communicate with each other using special protocols.

How does DNS work?

When you type www.youtube.com, your browser will send a request to DNS Resolver to find the IP address of www.youtube.com. The resolver will search through one DNS server at a time, attempting to find where the information is stored.



EXERCISES. ESSAY. Explain in at least three (3) sentences how Domain Name Systems (DNS) works. (10 pts)

Rubric:

Coherence of ideas – 5 Accuracy of content - 5

_____

_____

_____

_____

Image URL: http://tiny.cc/vj5v9y http://tiny.cc/7s5v9y
https://all-free-download.com/free-vector/free-vector-server.html

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title: Tools, Equipment And Testing Devices Needed For Computer Assembly.		
Learning Competency: Obtain tools, equipment and testing devices needed to carry out installation work in accordance with established procedures and check for correct operation and safety. **LE_IACSS9-12ICCS-Ia-e-28**		
Enabling skills: Identify the Tools and Equipment needed for Installation Work		
References : https://www.slideshare.net/eivyportuguez/materials-tools-equipment-and-testing-devices-73531266		LAS No.: 3

CONCEPT NOTES

Tools, equipment and testing devices are needed to carry out installation work in accordance with established procedures and check for correct operation and safety.

Equipment and Accessories	Tools
LAN Card	Screwdrivers(standard)
UPS	Screwdrivers(Philips)
Server	Long nose pliers
24 port hub	Mechanical pliers
Modem	Allen wrench
Fax machine	Multi-tester
PC video camera	Crimping tools
USB External CD writer	Soldering iron (30 watts)
USB Scanner	Wire striper
USB Printer	LAN tester
USB Flash Drive	Anti-static wrist strap
	Device driver/installer

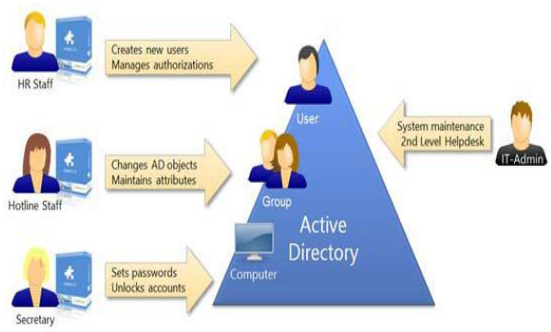
EXERCISES: IDENTIFICATION. Identify the following the given tool and equipment and be able to give their specific uses.

1 		4 	
2 		5 	
3 			

https://www.slideshare.net/eivyportuguez/materials-tools-equipment-and-testing-devices-73531266

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Domain Controller (Active Directory)		
Learning Competency : Install and update required modules/add-ons on NOS installation Procedures (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38) Enabling Skills: Explain what is Domain Controller (Active Directory).		
References : http://tiny.cc/uq5t9y http://tiny.cc/6n3v9y		LAS No.: 4

CONCEPT NOTES



- **Active Directory Domain Services (AD DS)** is a server role in Active Directory that allows admins to manage and store information about resources from a network, as well as application data, in a distributed database.
- It provides the methods for storing directory data and making this data available to network users and administrators.
- **Security** is integrated with Active Directory through **logon authentication** and **access control** to objects in the directory.

Domain Controller

- It is a server that responds to authentication requests and verifies users on computer networks.
- When users log into their domain, the DC checks their username, password, and other credentials to either allow or deny access for that user.

EXERCISE. Answer what is asked in each of the given question.

1. What is the meaning of the acronym ADDS?

_____

2. What is the other name of a server that runs Active Directory Domain Services?

_____

3. What is described as a hierarchical structure that stores information about objects on the network?

_____

4. What is the function of a Domain Controller?_____

_____

5. What is one of the security features integrated in ADDS?

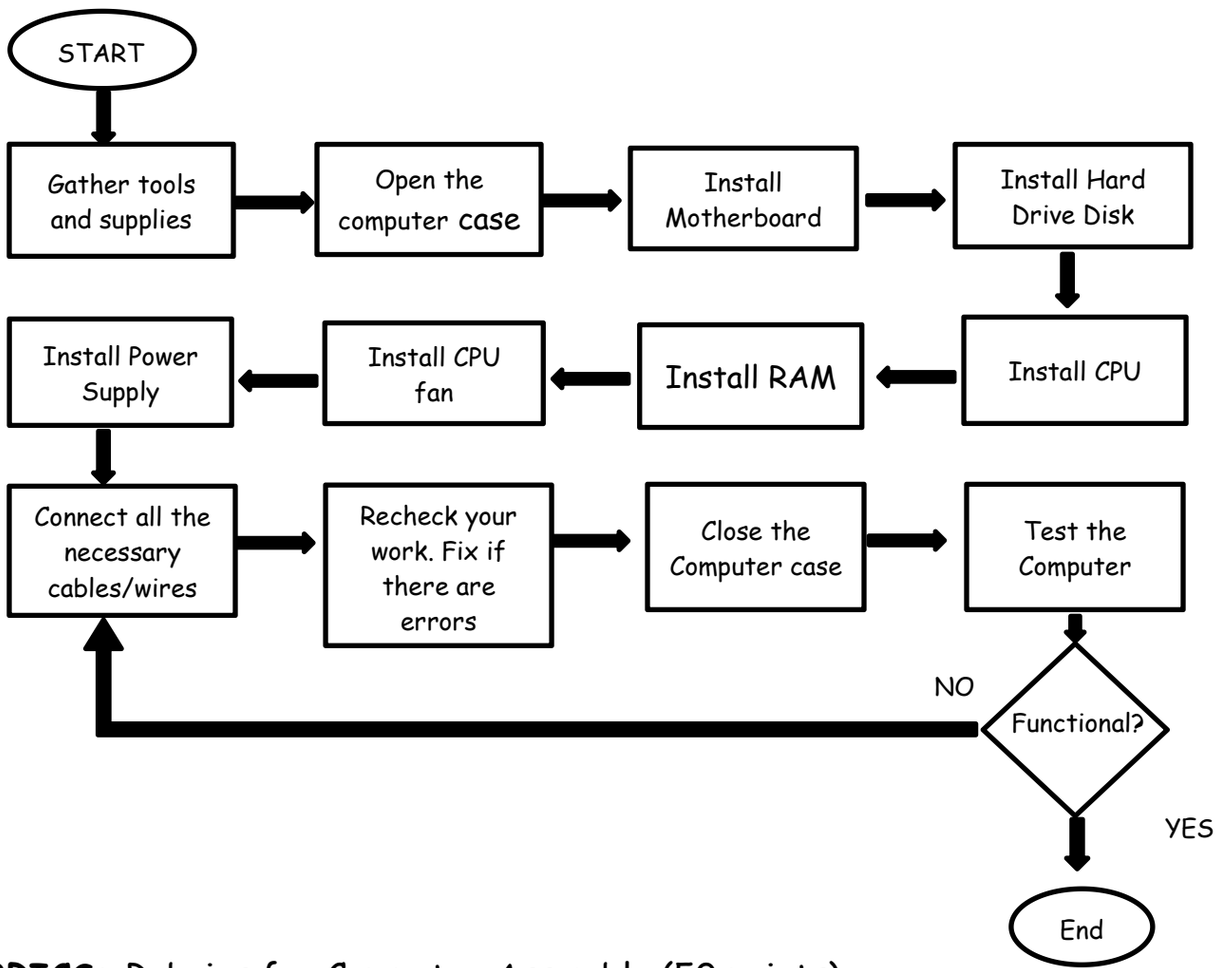
_____

Image URL: http://tiny.cc/o56t9y

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title: Computer Assembly Procedures		
Learning Competency: Assemble Computer Hardware in accordance with established procedures and system requirements. **LE_IACSS9-12ICCS-Ia-e-28**		
References : https://www.slideshare.net/ZoleZimbabwe/lesson-8-installing-and-configuring-computer-system		LAS No.: 4

PERFORMANCE TASK (50 points)

INSTRUCTION: The students will perform the following task in personal computer assembly (30 min).



RUBRICS: Rubrics for Computer Assembly (50 points)

CRITERIA	POOR	GOOD	VERY GOOD	EXCELLENT	TOTAL
Points Earned	3	5	8	10	
10 - ACCURACY					
10 - Adherence to the procedures					
10 - WORKMANSHIP Applied safety procedures					
10 - CREATIVITY					
10 - SPEED					

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Procedures In Planning And Preparing Maintenance		
Learning Competency: Plan maintenance and/ or diagnosis of faults in line with job requirements. **TLE_IACSS9-12MRCN-IIa-e-40**		
References: https://www.slideshare.net/darylformentera/final-cblm		LAS No.: 4.1

CONCEPT NOTES:

Plan and Prepare Maintenance Procedures

Planning and preparing systematic maintenance procedure will save time, money and frustration. It is a good idea and opportunity to learn the proper care and maintenance of your computer.

A. Plan Maintenance Procedures for Computer System and Networking.

1. Design a systematic maintenance plan for hardware.

plan.

ventilated area.

longer life.

turned off and unplugged.

2. Design a systematic maintenance plan for your software.

MONTHLY COMPUTER MAINTENANCE PLAN

	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Antivirus software checkups							
Disk space utilization							
Defragmentation of hard drives							
Troubleshoot hardware and software issues							

EXERCISE: CREATE A TABLE FOR PLAN/ PREPARE MAINTENACE (10 points)

Prepare/Design a ***Daily Maintenance Plan*** for your hardware. Given the time allotment of 1 week, give importance to the Maintenance for (Recalibrate the battery, clean computer case, Clean keyboard, Clean mouse, Clean screen and Clean up hard drives).

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Tools and tests equipment		
Learning Competency: Obtain tools, equipment, and testing devices needed for correct operation and safety. **TLE_IACSS9-12MRCN-IIa-e-40** Enabling Skills: Enumerate the materials, equipment and tools needed for testing devices		
References: https://www.slideshare.net/darylformentera/final-cblm		LAS No.: 4.2

CONCEPT NOTES:

Materials, Tools, Equipment and Testing Devices.

Tools this is program used for software development or system maintenance. Virtually any program or utility that helps programmers or users develop applications or maintain their computers can be called a tool. Examples of programming tools are compilers, interpreters, assemblers, 4GLs, editors, debuggers and application generators.

Materials Equipment/Facilities	Tools & Instruments	Supplies & Materials
Server Computer peripherals Desktop computers OHS guidelines Phil. Environmental protection standards Monitors Motherboard Power supply Network device and cablings Hubs Switches LAN Cards Printers and Scanners Routers USB Flash Drives	Protective eye wear Wire stripper with cutter Pliers(Assorted) Screw drivers (Assorted) Soldering iron/gun De-soldering tool Flashlight Tweezers Mirrors Antistatic wrist wrap LAN Tester Crimping tool Software installer Work bench Magnifying glass	Floppy disk Compact Disk

EXERCISE: ENUMERATION. Enumerate at least 5 each materials equipment and tools needed for testing devices

Materials	Tools
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : PPE		
Learning Competency: Use appropriate PPE in line with standard procedures TLE_IACSS9-12MRCN-IIf-j-41 Enabling skills: identify the appropriate PPE needed in line with standard procedures		
References: https://www.slideshare.net/darylformentera/final-cblm		LAS No.: 4.3

CONCEPT NOTES:

Personal Protective Equipment

There are tools and equipment's used to protect the user and the computer system.

Types of personal protective devices

1. Anti-static devices
2. Power surge protectors
3. Personal equipment's

ESD (Electro Static Discharge)

-A small amount of static electricity that can destroy small parts of your computer.

Anti-static devices

-Devices designed to protect the computer from static electricity.

Examples:

1. Anti-static wrist strap
2. Anti-static mat
3. Anti-static bag
4. Anti-static spray

Power surge protectors

-Devices designed to protect the computer from sudden power serges from intermittent power sources.

Examples:

1. AVR (Automatic Voltage Regulators)
2. UPS (Uninterrupted Power Supply)

Personal Equipment's

1. Small paint brush
2. Screw drivers
3. Pliers and tweezers
4. Compressed air
5. Handheld vacuum

EXERCISE: ENUMERATION. Enumerate at least 5 Personal Protective Equipment and explain its function in your own word.

PPE

1.

2.

3.

4.

5.

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Maintenance Of Computer Systems And Networks		
Learning Competency: Perform scheduled/ periodic maintenance in accordance with manufacturer's requirements **TLE_IACSS9-12MRCN-IIf-j-41** Enabling skills: identify the preventive maintenance and recommended frequency for the periodic maintenance.		
References: https://www.slideshare.net/darylformentera/final-cblm		LAS No.: 4.4

CONCEPT NOTES:

Periodic Maintenance Scheme

Regular scheduled upkeep of your computer will keep you and you and your computer working properly.

Daily Schedule

- Update virus and spyware definitions
- Do incremental backup – back up updated files for each date.
- Reboot upon crash- Reboot the computer to fix your pc upon crash.

Weekly

- Full virus and spyware scan
- Complete backup of files
- Patch up –Get latest software update for your operating system.

Monthly

- Clean your PC inside and out.
- Defrag- defrag your hard drive to speed up its operation.

Yearly

- Check your programs – clean up unused programs
- Reformat your hard drive and reinstall the operating system
- Make a full diagnostic check on hardware and software

Preventive Maintenance Activity	Recommended Frequency	Auto?
Scan hard disk file systems for errors	Daily	Yes
Scan for viruses	Daily	Yes
Back up data	Daily	No
Clean monitor screen	Weekly	No
Defragment hard disks	Monthly	Yes
Scan for hard disk read errors	Weekly	Yes
Clean mouse	Monthly	No

EXERCISE: IDENTIFICATION. Identify the recommended frequency in Preventive Maintenance Activity.

_____1. Clean mouse
_____2. Back up data.
_____3. Clean monitor screen.
_____4. Defragment hard disk.
_____5. Scan for viruses.

Name:	Date:	Score:
Subject : CSS (COMPUTER SYSTEMS SERVICING)		
Lesson Title: **Removing Viruses**		
Lesson Competency : **Implement contingency measures in accordance with established procedures TLE_IACSS9-12MRCN-IIIa-h-42** **Enabling Skills: Explained the importance of Removing Viruses.**		
References : https://www.slideshare.net/darylformentera/final-cblm		LAS No.:4.5

Concept Notes

COMPUTER VIRUS

Computer Virus

- A virus is a destructive executable program that infects the other programs in the system and spreads by replicating itself.
- Such a program is designed to damage the victim's computer files.
- Viruses are coded by malicious programmers in a way that they can spread in the system without one's permission and knowledge.

How do Virus Affects a System?

- It corrupts files
- It slows down the speed of the computer system
- It causes the system to hang frequently
- It deletes various files

Sources of Virus Infection A virus can enter the system and infect it through various sources. Some of the sources are

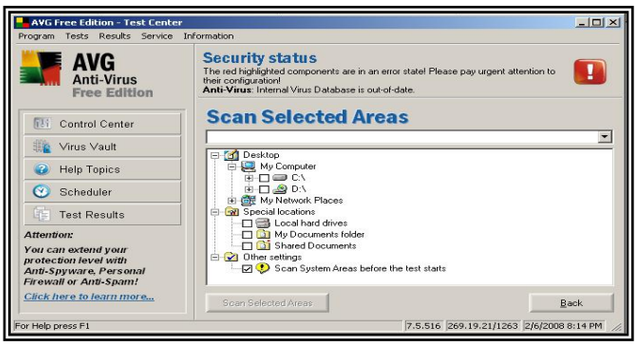
- Infected CDs, DVDs, pen drives, etc
- E-mail
- Browsing infected sites
- Downloading files from the internet

Steps to Remove Viruses

Removing viruses, though technical, is yet a very simple process if all the required steps are properly followed.

The basic steps are:

- Buy or download an antivirus software
- Install the antivirus software
- Update antivirus software with the latest virus definitions
- Do a complete system scan



EXERCISES: ESSAY: Answer the question as briefly as you can.

Why is it important to remove viruses in your computer?

Rubric: Coherence of ideas – 10 Accuracy of content - 10

Name:	Date:	Score:
Subject : CSS (COMPUTER SYSTEMS SERVICING)		
Lesson Title: **Methods Of Eliminating Viruses**		
Lesson Competency: : **Implement contingency measures in accordance with established procedures** **TLE_IACSS9-12MRCN-IIIa-h-42**		
Enabling Skills: Enumerate the types of Viruses.		
References : https://www.slideshare.net/darylformentera/final-cblm		LAS No.:4.6

Concept Notes

Methods of Eliminating Viruses

Removing the virus – When the virus can be easily identified and can be removed without affecting other files, then the antivirus removes it from the host place.

Quarantine – This is done when the virus cannot be easily identified removed from the file and the removal of virus means the removal of the complete file. In this method, although the virus is not eliminated, it is rendered inactive by moving the file into "quarantine" and renaming it.

Types of viruses and Examples

Boot viruses: These viruses infect floppy disk boot records or master boot records in hard disks. They replace the boot record program (which is responsible for loading the operating system in memory) copying it elsewhere on the disk or overwriting it. Boot viruses load into memory if the computer tries to read the disk while it is booting.

Examples: Form, Disk Killer, Michelangelo, and Stone virus

Program viruses: These infect executable program files, such as those with extensions like .BIN, .COM, .EXE, .OVL, .DRV (driver) and .SYS (device driver). These programs are loaded in memory during execution, taking the virus with them. The virus becomes active in memory, making copies of itself and infecting files on disk.

Examples: Sunday, Cascade

Multipartite viruses: A hybrid of Boot and Program viruses. They infect program files and when the infected program is executed, these viruses infect the boot record.

Examples: Invader, Flip, and Tequila

Stealth viruses: These viruses use certain techniques to avoid detection. They may either redirect the disk head to read another sector instead of the one in which they reside or they may alter the reading of the infected file's size shown in the directory listing. size given in the directory. Examples: Frodo, Joshi, Whale

Polymorphic viruses: A virus that can encrypt its code in different ways so that it appears differently in each infection. These viruses are more difficult to detect.

Examples: Involuntary, Stimulate, Cascade, Phoenix, Evil, Proud, Virus 101

Macro Viruses: A macro virus is a new type of computer virus that infects the macros within a document or template. When you open a word processing or spreadsheet document, the macro virus is activated and it infects the Normal template.

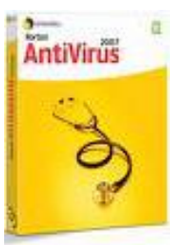
Examples: DMV, Nuclear, Word Concept.

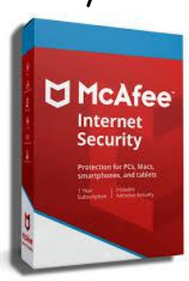
Antivirus Software

Software designed to cure virus infected machines. An antivirus is a program that searches for, identifies and removes potential viruses existing in the computer system

Examples of Anti-virus software:

- Symantec Norton antivirus
- AVG antivirus
- McAfee Scan
- Microsoft Antivirus





EXERCISES: ENUMERATION.

Enumerate the 5 types of viruses.

1._____ 2._____

3._____4._____ 5._____

Name:	Date:	Score:
Subject : CSS (COMPUTER SYSTEMS SERVICING)		
Lesson Title: **Virus Removal**		
Lesson Competency: : **Implement contingency measures in accordance with established procedures** **TLE_IACSS9-12MRCN-IIIa-h-42** **Enabling Skills: Removed Viruses.**		
References : https://www.slideshare.net/darylformentera/final-cblm		LAS No.:4.7

Performance task

Virus removal

Equipment:

System unit
Monitor
Keyboard and Mouse

Materials

Anti-virus Software (AVG anti-virus)

Virus removal

Provided with the necessary equipment and materials troubleshoot the virus infected area.

Performance Rubrics for Virus Removal

You will be assessed using the following criteria

Evaluation: **CRITERIA**	**Rating**	**Points**
1.Periodic maintenance is observed	20%	
2. Observance of safety precautions.	20%	
3. Appropriate materials are used virus removal.	30%	
4. Confirmation of computers normal function.	30%	
Total	100%	

SHARED OPTIONS
SENIOR HIGH ALTERNATIVE RESPONSIVE EDUCATION DELIVERY
GRADE 11 DLP LEARNING ACTIVITY SHEET

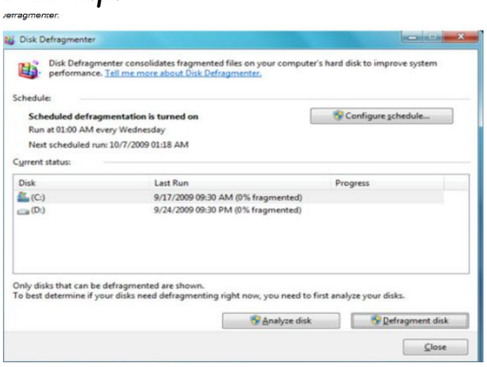
Name:	Date:	Score:
Subject : CSS (COMPUTER SYSTEMS SERVICING)		
Lesson Title: System Maintenance Tools		
Lesson Competency: : **Implement contingency measures in accordance with established procedures TLE_IACSS9-12MRCN-IIIa-h-42** **Enabling Skills: Identify the correct maintenance tool.**		
References : https://www.addictivetips.com/windows-tips/windows-7-system-maintenance-tools/		LAS No.:4.8

Concept Notes

Windows 7 System Maintenance Tools

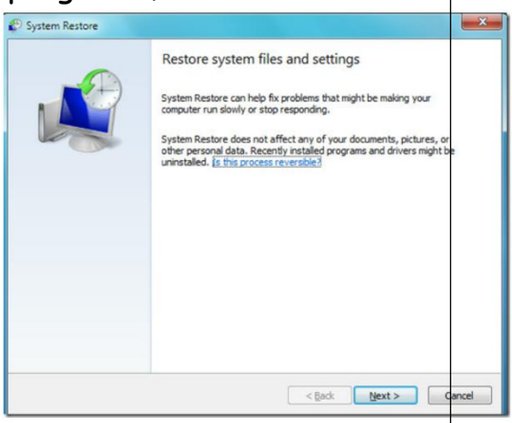
Below are some of the built-in system maintenance tools available in both Windows 7.

Disk Cleaner- The disk cleaner is a great windows tool which performs disk clean-up operation. It basically finds and removes the temporary files, also empties the Recycle Bin, and detects and removes the files that are no longer needed. You can launch it from *Start › All Programs › Accessories › System Tools › Disk Cleanup.*



Disk Defragmenter
It lets you safely terminate the defrag process at any time without any adverse effects and it can also defrag multiple volumes at the same time. Disk Defragmenter can be launched from *Start › All Programs › Accessories › System Tools › Disk Defragmenter.*

System Restore
System Restore allows you to roll back(restore) system files, registry keys, installed programs, etc to a previous state in case of any disaster. Both Windows 7 provide an enhanced and improved version of the System Restore feature.



Control Panel System Maintenance Tool
You can also perform many common system maintenance tasks from the Windows 7 Control Panel. Open the Control Panel and go to *System and Security › Find and Fix Problem.* Now the Troubleshooting option will be displayed and you can troubleshoot any problem relevant to the system, network, internet etc.

EXERCISES: IDENTIFICATION.
Identify the correct Maintenance Tool being referred to in each of the given item. Write your answer on the space provided before each number.

_____1. Is a great windows tool which performs disk clean-up operation.
_____2. It safely terminates the defrag process at any time without any adverse effects.
_____3. Allows you to roll back system files, registry keys, installed programs.

Name:	Date:	Score:
Subject : CSS (COMPUTER SYSTEMS SERVICING)		
Lesson Title: System Maintenance Tools		
Lesson Competency: : **Implement contingency measures in accordance with established procedures TLE_IACSS9-12MRCN-IIIa-h-42** **Enabling Skills: Identify the correct maintenance tool.**		
References : https://www.addictivetips.com/windows-tips/windows-7-system-maintenance-tools/		LAS No.:4.8

Concept Notes

_____4. You can troubleshoot any problem relevant to the system, network, internet etc.

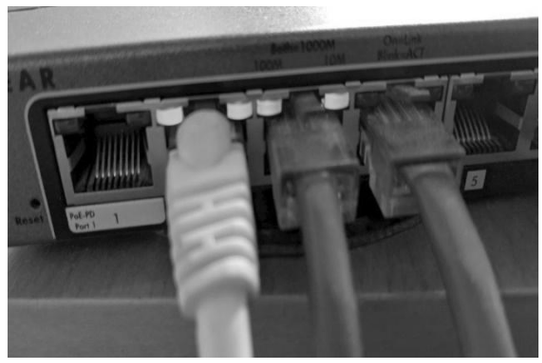
Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Testing The Computer Network		
Learning Competency : Undertake final inspection so that the configuration conforms to the manufacturer's instructions/manual (TLE_IACSS9-12MRCN-IVf-j-44)		
References : http://tiny.cc/ujfaaz http://tiny.cc/lqfaaz		LAS No.: 4.9

PERFORMANCE TASK

Conduct the following tests to make sure the computer network is functional.

A. Check the physical connections

1. Check that the link light next to the RJ-45 port is lit on the back panel of the computers.
2. Check the link light of the network switch where the computers and router are connected.
3. Check the link light of the router where the computer and/or switch are connected.



B. Verify that you can log on using a domain account

1. If the physical connections are good, log on to each computer network using a valid domain user account.

C. Check the network configuration

1. Click **Start**.
2. Type cmd then press Enter.
3. In command prompt, type ipconfig/all and press Enter.
4. Look for the IP address of the computer. It should look like this:

IPv4 address…….. 192.168.1.125

If this part of the output does not show a valid IP address, you need to check that your IP configuration is set correctly and that your DHCP server is working.

RUBRIC FOR THE PERFORMANCE OUTPUT:

Can work independently	- 5
Accuracy of work	- 10
Follows safety procedures	- 5
Total:	**20**

Image URL: http://tiny.cc/bcgaaz

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Testing The Computer System (Hardware)		
Learning Competency : Undertake final inspection so that the configuration conforms to the manufacturer's instructions/manual (TLE_IACSS9-12MRCN-IVf-j-44)		
References : Technology and Livelihood Education 9 Learner's Material - First Edition Pages 230 – 234		LAS No.: 4.10

PERFORMANCE TASK

A. Tools, Materials, and Equipment

Desktop Computer
Power cords
VGA cable
Keyboard
Mouse
Monitor
Multitester

B. Steps/Procedure:

1. Computer monitor and its peripherals

1. Check the VGA cable attached on the monitor and the system unit. It should be securely attached on the VGA port.
2. Check the monitor power cord. It should also be securely attached on the power socket of the monitor.

B. Keyboard and mouse

1. Check the secure connection of the keyboard to the back panel of the system unit.
2. Check the secure connection of the mouse at the back panel of the system unit.

C. Power supply

1. Using a multi-tester, test the output voltage of the power connectors of the power supply unit.
2. Check for any physical defects of the power cord attached to the power supply unit of the computer.

RUBRIC FOR THE PERFORMANCE OUTPUT:

Can work independently	- 5
Accuracy of work	- 10
Follows safety procedures	- 5
Total:	20

Image URL: http://tiny.cc/ffgaaz http://tiny.cc/5riaaz

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Testing The Computer System (Hardware)		
Learning Competency : Undertake final inspection so that the configuration conforms to the manufacturer's instructions/manual (TLE_IACSS9-12MRCN-IVf-j-44)		
References : Technology and Livelihood Education 9 Learner's Material - First Edition Pages 230 – 234		LAS No.: 4.10

Rubric:

Can work independently	- 5
Accuracy of work	- 10
Follows safety procedures	- 5
Total:	**20**

Image URL: http://tiny.cc/ffgaaz http://tiny.cc/5riaaz

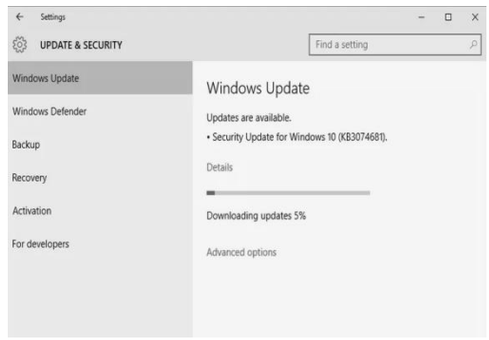
Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Testing The Computer System (Software)		
Learning Competency : Undertake final inspection so that the configuration conforms to the manufacturer's instructions/manual (TLE_IACSS9-12MRCN-IVf-j-44)		
References : Technology and Livelihood Education 9 Learner's Material - First Edition Pages 230 – 234		LAS No.: 4.11

PERFORMANCE TASK

A. Tools, Materials, and Equipment

Desktop Computer
Windows Operating System
Antivirus software
Any application software

B. Steps/Procedure:



1. Operating System

- Open **Windows Update** to get the latest patches and protection for the operating system
- Download the update

2. Application Software

- Check for updates of the application software
- Download the udpates

3. Anti-virus software

- Run the antivirus program
- Check for updates
- Download the updates

RUBRIC FOR THE PERFORMANCE OUTPUT:

Can work independently	- 5
Accuracy of work	- 10
Follows safety procedures	- 5
Total:	20

Image URL: http://tiny.cc/oykaaz

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Active Directory Objects		
Learning Competency : Install and update required modules/add-ons on NOS installation procedures (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38) Enabling Skills: Explain what Active Directory Objects is.		
References : http://tiny.cc/7a6v9y http://tiny.cc/od6v9y http://tiny.cc/3c6v9y http://tiny.cc/2e6v9y		LAS No.: 5

CONCEPT NOTES

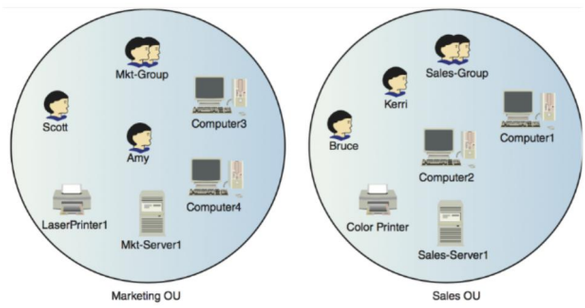
- **Active Directory** - contains data on users, groups, computers, and on which resources these users, groups, and computers can access.
- Real-world entities such as users and computers are represented as **objects** in Active Directory.
- Objects that contain other objects are **container objects**.

Active Directory Objects

1. **Organizational Unit (OU)** is a container in Active Directory domain that can contain different objects from the same AD domain: other containers, groups, user and computer accounts.
   - It enables users to delegate administrative control for one OU in a domain and not for another OU in the same domain.

2. **User account** allows a computer user to log on to the domain and access resources throughout, based on his/her username and password.

3. **Group** consists of user accounts, other groups, and computers. Groups enable policy based administration within Active Directory.



EXERCISES

Fill in the boxes with examples of Active Directory objects for the ABC High School domain.

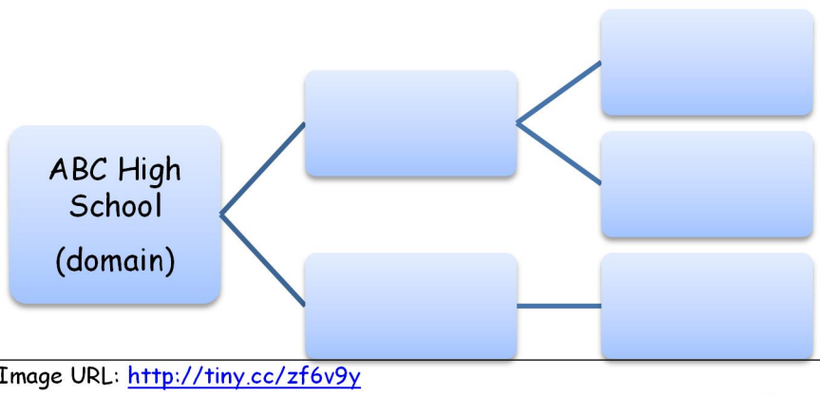


Image URL: http://tiny.cc/zf6v9y

Rubric:

1. Relevance of Content to the given domain – 5

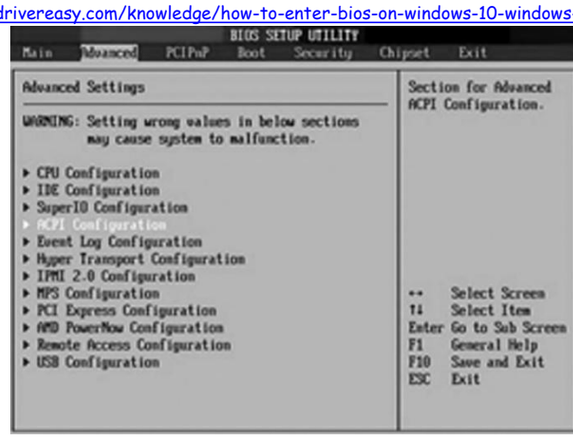
2. Accuracy of assigned Objects - 5

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Power ON Self-Test And Basic-Input-Output-System (BIOS) Configuration Procedures		
Learning Competency: Perform BIOS configuration in accordance with hardware requirements **TLE_IACSS9-12ICCS-Ia-e-28** Enabling skills: Identify the keywords that can be found in BIOS set up		
References : https://computer.howstuffworks.com/bios3.html https://www.drivereasy.com/knowledge/how-to-enter-bios-on-windows-10-windows-7/		LAS No.: 5

CONCEPT NOTES

https://www.drivereasy.com/knowledge/how-to-enter-bios-on-windows-10-windows-7/

To enter the CMOS Setup, you must press a certain key or combination of keys during the initial start-up sequence. Most systems use "Esc," "Del," "F1," "F2," "Ctrl-Esc" or "Ctrl-Alt-Esc" to enter setup. There is usually a line of text at the bottom of the display that tells you "Press ___ to Enter Setup."



System Time/Date - Set the system time and date.
Boot Sequence - The order that BIOS will try to load the operating system.
Plug and Play - A standard for auto-detecting connected devices; should be set to "Yes" if your computer and operating system both support it.
Mouse/Keyboard - "Enable Num Lock," "Enable the Keyboard," "Auto-Detect Mouse".
Drive Configuration - Configure hard drives, CD-ROM and floppy drives.
Memory - Direct the BIOS to shadow to a specific memory address.
Security - Set a password for accessing the computer.
Power Management - Select whether to use power management, as well as set the amount of time for standby and suspend.
Exit - Save your changes, discard your changes or restore default settings.

EXERCISE: IDENTIFICATION. Identify the Key words that can be found in the BIOS configuration option.

_____1. This will configure the hard drives, CD-ROM and floppy drives.
_____2.This is the order that BIOS will try to load the operating system.
_____3.This sets a password for accessing the computer.
_____4.This sets the system time and date.
_____5.This is the standard for auto-detecting connected devices.

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : User Access Level Configurations (User Accounts)		
Learning Competency : 1.1 Create user folder in accordance with Network operating system features (TLE_IACSS9-12SUCS-IIIa-e-37). Enabling Skills: Explain the User Access Level Configurations (User Accounts).		
References : http://tiny.cc/q6zt9y http://tiny.cc/r80t9y		LAS No.: 6

CONCEPT NOTES:

User account - is a collection of settings and information that tells Windows which files and folders you can access, what you can do on your computer, what are your preferences, and what network resources you can access when connected to a network.

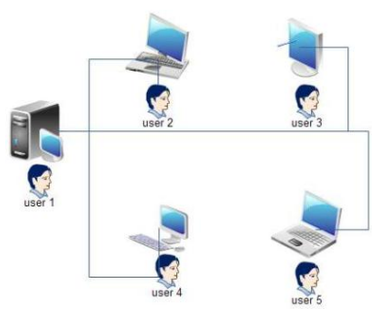
A user account in Windows is characterized by the following attributes:

User name – is the name given to the user account.

Password – is the password associated with the user account (in Windows 7 or older versions you can also use blank passwords).

User group –is a collection of user accounts that share the same security rights and permissions. A user account must be a member of at least one user group.

Type – is a user account which defines their permissions and what they can do in Windows.



EXERCISES: TRUE OR FALSE. Write T if the statement is true and F if the statement is False.

_____1. A user group is the name given for the user account.

_____2. Type refers to the collection of settings and information that tells Windows which files and folders one can access.

_____3. Blank passwords are allowed in a network operating system such as Windows Server 2008 R2.

_____4. A user type defines the user permissions and what can be done in Windows.

_____5. A user group shares the same security rights and permissions.

Image URL: http://tiny.cc/2r0t9y http://tiny.cc/sc0t9y

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title: Create Portable Bootable Devices Using Diskpart/Cmd		
Learning Competency: Create portable Bootable Devices in accordance with software manufacturer instruction. **TLE_IACSS9-12ICCS-If-j-29** Enabling skills: Identify the steps in creating portable bootable devices		
References : https://www.eassos.com/how-to/create-bootable-usb.php https://www.dell.com/support/article/ph/en/phdhs1/sln153364/create-a-bootable-usb-flash-drive-using-the-diskpart-utility?lang=en		LAS No.: 6

CONCEPT NOTES

A **Bootable Disk** enables you to boot computer from CD or USB disk instead of system installed on local hard drive. It is referred to as a startup disk that includes demanded files to boot to certain operating system.

USB bootable using DISKPART/CMD

Steps (type the following):

1. **DISKPART** - This will start the utility.
2. **LIST DISK** - This will show the disk number of your USB flash drive. In the image below the USB flash drive shows as Disk 2.
3. **SELECT DISK X** (Replace X with your USB flash drive number, we are using 2 in this example)
4. **CLEAN -** This wipes the drive.
5. **CREATE PARTITION PRIMARY-** This creates partition.
6. **SELECT PARTITION 1-** This selects partition 1.
7. **ACTIVE-** This will mark the current partition as active
8. **FORMAT FS=NTFS QUICK** - This formats the partition
9. **ASSIGN**- This will assigns a drive letter.
10. **EXIT**

Copy all the data from Windows installation disk to your USB bootable device

NOTE: we need to run command prompt or CMD as administrator.

EXERCISE: IDENTIFICATION. Identify the COMMAND in creating USB portable Bootable Device.

_____1.This is a command in creating a primary partition and further recognized by windows as partition 1.

_____2.This command assigns letter to represent your USB flash drive.

_____3.This is a command in activating current partition.

_____4.This is a command in formatting current partition as NTFS file system quickly.

_____5.This command assigns letter to your drive.

Name:	Date:	Score:
Subject : TVL – ICT - Computer Systems Servicing		
Lesson Title : User Access Level Configurations (User Account Permissions)		
Learning Competency :Configure user access level based on NOS features (TLE_IACSS9-12SUCS-IIIa-e-37) Enabling Skills: Identify the different User Access Level Configurations (User Account Permissions)		
References : http://tiny.cc/1bmv9y http://tiny.cc/kfmv9y		LAS No.: 7

CONCEPT NOTES:

User Group is a collection of user accounts that share the same security rights and permissions.

Predefined user groups in Windows: **Administrators** and **Users**

User Account Permissions:

1. Administrator account has complete and unrestricted access to the computer/domain

- Create, change, and delete accounts.
- Change settings that affect all of the computer's users.
- Change security-related settings.
- Install and remove apps.
- Access system files and files in other user account profiles.

2. Standard user account allows a user to do things that affect only his or her account

- Change or remove the password.
- Change the user account picture.
- Change the theme and desktop settings.
- View files stored in his or her personal folders and files in the Public folders.

EXERCISES: ENUMERATION. Answer what is asked in each of the given statement.

1. List the important tasks of an Administrator Account. Write them in bullet form.

2. Enumerate or jot down the tasks of a Standard User Account. Write them in bullet form.

EXERCISES. ESSAY. Answer as briefly as you can.

Which from the Administrator's Account tasks you find difficult to do? Why?

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title: Create Portable Bootable Devices Using RUFUS Software.		
Learning Competency: Create Portable Bootable Devices in accordance with software manufacturer instruction. **TLE_IACSS9-12ICCS-If-j-29** Enabling skills: Identify the steps in creating the Portable Bootable Devices.		
References : https://www.eassos.com/how-to/create-bootable-usb.php https://www.windowspasswordsrecovery.com/fix-windows/how-to-use-rufus-to-create-bootable-usb-drive.html		LAS No.: 7

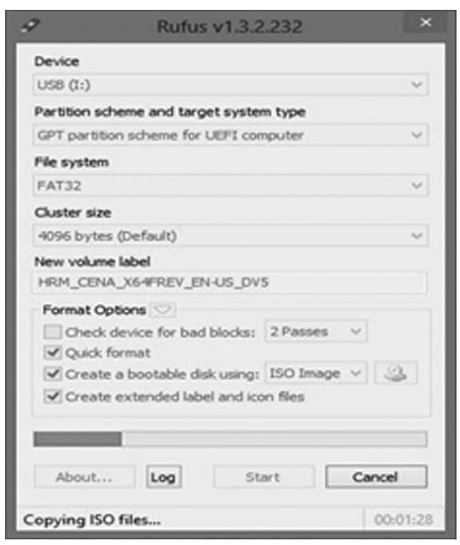
CONCEPT NOTES

A Bootable Disk enables you to boot computer from CD or USB disk instead of system installed on local hard drive. It is referred to as a startup disk that includes demanded files to boot to certain operating system.

USB bootable using Rufus software

Steps (type the following):

1. Launch the program and insert USB flash drive to your computer.
2. Select your USB under "Drive" menu.
3. Choose "MRB partition scheme for BIOS or UEFI computers".
4. Change file system from FAT32 to NTFS.
5. Change the volume label.
6. Set "Create a bootable disk using" and "ISO Image".
7. Then click the disk icon to open your Windows 10/8.1/8/7 ISO file.
8. Click "Start" to write the bootable USB flash drive.



https://www.windowspasswordsrecovery.com/fix-windows/how-to-use-rufus-to-create-bootable-usb-drive.html

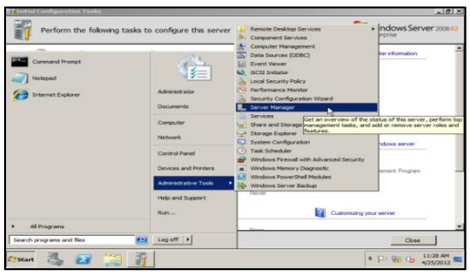
EXERCISE: ENUMERATION. Enumerate/ Jot down in order the fundamental steps in creating a USB Portable Bootable Device.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

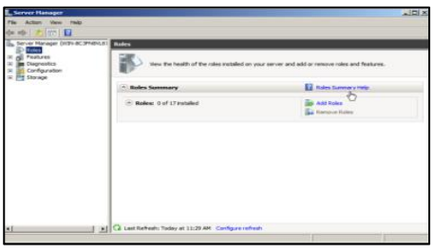
Name:	Date:	Score:
Subject : TVL – ICT - Computer Systems Servicing		
Lesson Title : Adding Server Roles (Active Directory Domain Services)		
Learning Competency : Install and update required modules/add-ons on NOS installation procedures (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References : http://tiny.cc/7o7v9y		LAS No.: 8

PERFORMANCE TASK

Perform the following procedure in Windows Server 2008 R2

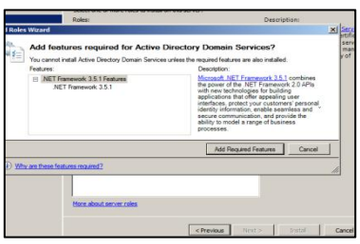


1. Select **Start** < **Administrative Tools** > **Server Manager**.



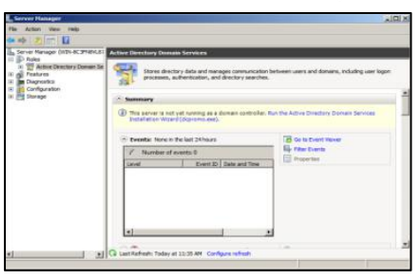
2. **Server Manager** appears. Select **Roles** on the left side then click **Add Roles**.

3. The **Add Roles Wizard** appears. By default, the **Before You Begin** information screen is shown. Click **Next**.
4. The **Select Server Roles** screen appears.



5. Select **Active Directory Domain Services** and click **Next**. If .NET 3.5.1 is not installed, the wizard prompts you to install it.

6. The **Active Directory Domain Services** informational screen appears. Click **Next**.
7. The **Confirm Installation Selections** screen appears. Confirm your selections and click **Install**.
8. The installation runs and the **Installation Progress** screen appears.
9. Once the installation is completed, the **Installation Results** screen appears.
10. Click **Close** to complete the wizard. You return to Server Manager.



Note: The **Active Directory Domain Services role** now appears under **Roles** in Server Manager.

Rubric:

Work independently	- 5
Accuracy of work	- 10
Follows safety procedures	- 5
	Total: 20

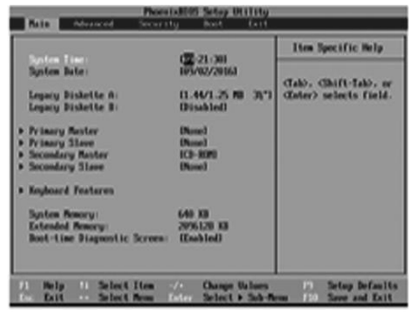
Image URL: http://tiny.cc/7o7v9y

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Configuring BIOS BOOT Order Settings		
Learning Competency: Install Operating System (OS) in accordance with established installation procedures and to comply with end-user requirements. **TLE_IACSS9-12ICCS-IIa-j-30** Enabling skills: Enumerate the steps in setting the BIOS Boot setup		
References : https://www.lifewire.com/change-the-boot-order-in-bios-2624528		LAS No.: 8

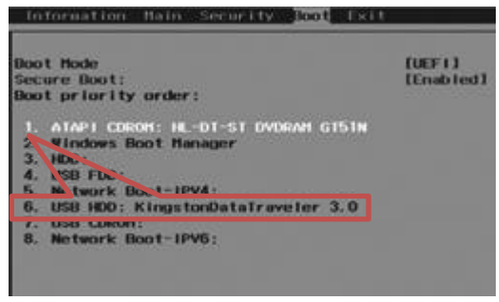
CONCEPT NOTES

BIOS (Basic Input Output Subsystem) is a programmable chip that controls how information is passed to various devices in the computer system. A typical method to access the BIOS settings screen is to press ESC, F1, F2, F8 or F10 during the boot sequence[1].

1. Restart your computer and press ESC, F1, F2 F8 or F10 during the boot sequence.
2. Choose to enter BIOS setup. The BIOS setup utility page appears.
3. Use the arrow keys to select the BOOT tab. System devices appear in order of priority.
4. To give a USB Flask drive boot sequence priority over the hard drive, move it to the first position in the list.
5. Press F10 to Save and exit the BIOS setup utility.
6. The computer will restart with the changed setting.



Bios Setting[1]



Boot[2]

TIPS: To set boot priority using a device selection menu:

1. When the computer starts to boot up, after the manufacturer's ID screen, press F12 several times. The device selection menu appears.
2. Use the up and down arrows to select CD-ROM or an USB Flash Drive.
3. To boot from the selected device, press ENTER.

EXERCISE: ENUMERATION. Enumerate the steps in setting the BIOS BOOT in sequence.

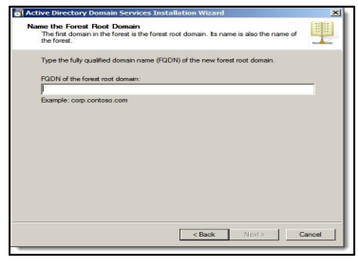
1. 4.
2. 5.
3.

[1] Boot Setting - https://www.lifewire.com/change-the-boot-order-in-bios-2624528
2Boot - http://www.it4nextgen.com/change-boot-order-uefi-bios/

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Adding Server Roles (Domain Name System)		
Learning Competency : Install and update required modules/add-ons on NOS installation procedures (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References : http://tiny.cc/et1v9y		LAS No.: 9

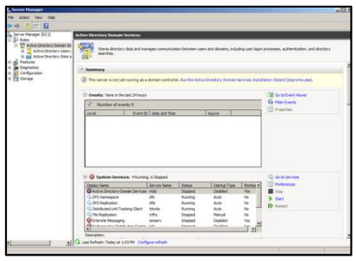
PERFORMANCE TASK

Perform the following procedures in Windows Server 2008 R2



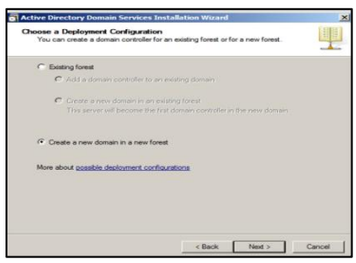
Note: We need to run DCPROMO.EXE
to enable the server to act as a Domain Controller.

1. Open **Server Manager**.
2. Select **Roles > Active Directory Domain Services**.
3. In the Summary section, click **Run the Active Directory Domain Services Installation Wizard (dcpromo.exe).**



3. The **Active Directory Domain Services Installation Wizard** appears. Click **Next**.

4. The **Operating System Compatibility** information screen appears. Click **Next**.
5. Choose **Create a new domain in a new forest.**



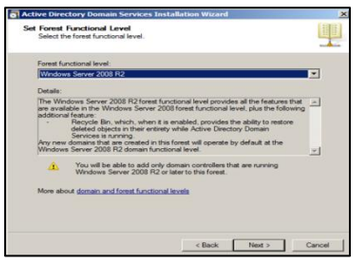
6. Now you can name your domain. We will be using the domain name **CSS** and the suffix **.com**. (CSS.com)

RUBRIC FOR THE PERFORMANCE OUTPUT

Work independently	**- 5**
Accuracy of work	**- 10**
Follows safety procedures	**- 5**
	Total: 20

7. Change forest functional level

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Adding Server Roles (Domain Name System)		
Learning Competency : Install and update required modules/add-ons on NOS installation procedures (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References : http://tiny.cc/et1v9y		LAS No.: 9



8. Include DNS in the installation as this will allow us to have an AD Integrated DNS Zone. When you click **Next**, you will be prompted with a message. Click **Yes** to continue.
9. The **Location for Database, Log Files, and SYSVOL** screen appears. Click **Next**.
10. Assign a "strong" password for the Administrator account. Click **Next**.
11. Review the summary of the configure services. Click **Next**.
12. Check the **Reboot on completion** checkbox.
13. To close the **Active Directory Domain Services Installation Wizard,** click **Finish**.

Rubric:

Work independently	- 5
Accuracy of work	- 10
Follows safety procedures	- 5
	Total: 20

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Creating Partition During Windows 7 Installation		
Learning Competency: Install Operating System (OS) in accordance with established installation procedures and to comply with end-user requirements. **TLE_IACSS9-12ICCS-IIa-j-30** Enabling Skills: Enumerate the steps in creating Partition during Windows 7 Installation		
References : https://www.sevenforums.com/tutorials/52291-partition-hard-drive-windows-7-install.html https://www.petri.com/creating-a-partition-during-windows-7-installation		LAS No.: 9

CONCEPT NOTES

During the installation of Windows 7, you must choose a partition on which to install the operating system. Reading Microsoft's recommendations, you must make this partition at least 16GB in size.

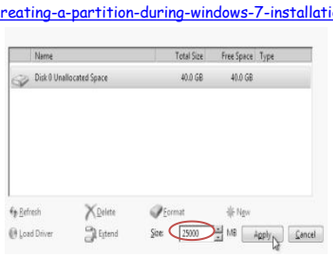
The steps are as follows:

1. Click on "Drive options (advanced)". The screen will change and show you several new buttons:

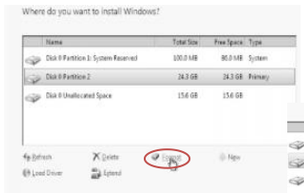
https://www.petri.com/creating-a-partition-during-windows-7-installation

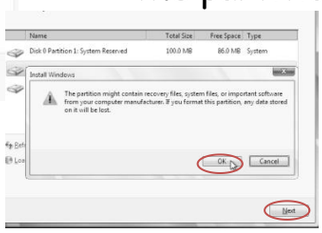
New – To create a new partition.
Delete – To delete a specific partition – all data on that partition will be deleted!
Format – To format a specific partition – all data on that partition will be deleted!
Extend – To extend a partition beyond the barrier of the physical disk, and to span the partition on more than one physical disk.

https://www.petri.com/creating-a-partition-during-windows-7-installation



2. Click new and in the "Size" box, enter the size for the new partition. When done, click "Apply".
3. Click "Format" to format the new partition.
4. You'll be warned that all data will be deleted. That should pose no issue because the partition was just created, and it is blank.





5. Click ok.

https://www.petri.com/creating-a-partition-during-windows-7-installation

EXERCISE: ENUMERATION. Enumerate the steps in creating partition during windows 7 installation.

1.
2.
3.
4.
5

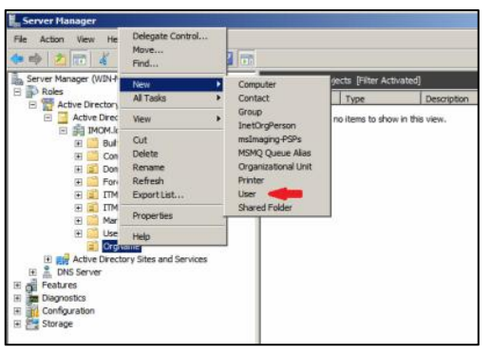
Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Adding Active Directory Objects		
Learning Competency : * Install and update required modules/add-ons on NOS installation procedures * Confirm network services based on user/system requirements (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References : http://tiny.cc/wtix9y http://tiny.cc/9vix9y		LAS No.: 10

PERFORMANCE TASK

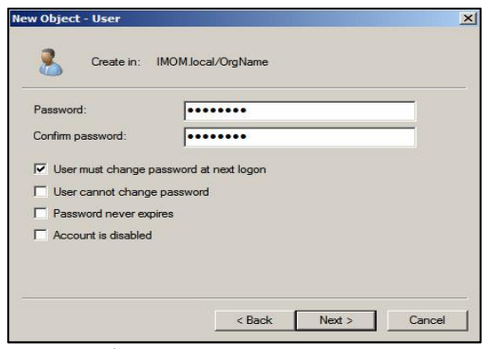
Perform the given procedures in Windows Server 2008 R2

A. Adding Organizational Unit and Users

1. Open **Server Manager**.
2. Select **Roles**.
3. Expand **Active Directory Domain Services** by clicking the + sign.
4. Expand **Active Directory Users and Computers** by clicking the + sign.
5. Right-click on the server name, click **New** then click **Organizational Unit**.
6. Create an organizational unit container. Type **ABC High School** in the **Name** box. Make sure **Protect container from accidental deletion** is checked.
7. Create a user. Right-click on the OU you created, select **New**, then click User.



8. Fill up the boxes in the **New Object – User** dialog box. The **User logon name** is what the computer user will use to connect to the domain. You may follow this format: ABC_<your lastname>
9. Type the initial password of that user account.



10. You now have a container object that you can use to manage users, user groups and roles.

B. Creating a Child OU

1. To create a Child OU container inside the OU you have created, right-click on the OU then click **Organizational Unit**.

C. Creating a User Group

1. Right-click on the OU where you want to create a group.
2. Select **Group**.
3. To move existing accounts into a group, you need to hold down the Control Key and click the user or computer accounts that you want to move in that group.
4. Right-click on any one of those accounts and select **Add to group**.
5. Type the group name and click **Check Names**. Once the group name is found, the text will be underlined .
6. Click **OK** button to continue.

RUBRIC FOR THE PERFORMANCE OUTPUT

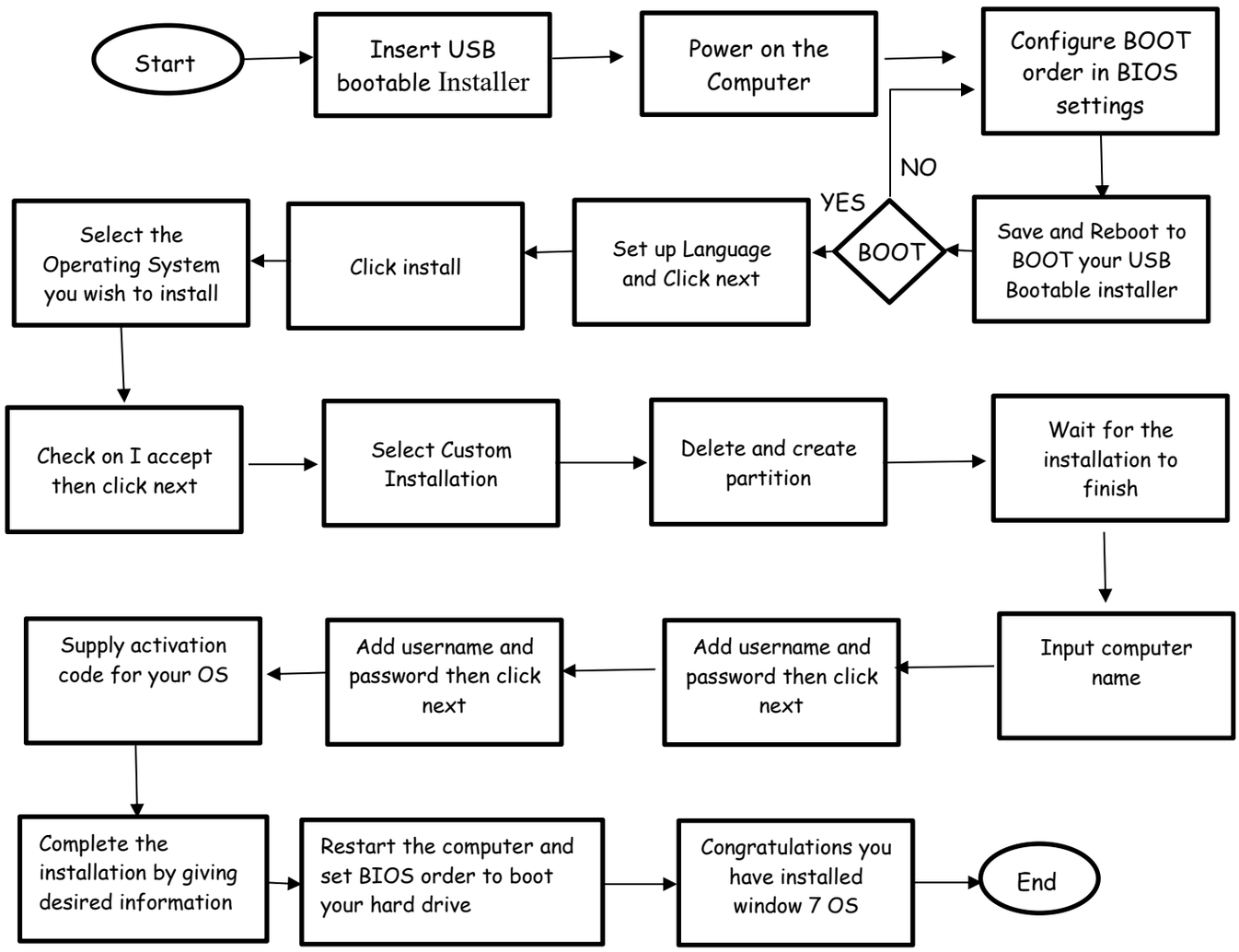
Work independently	- 5
Accuracy of work	- 10
Follows safety procedures	- 5
Total	20

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Installation of Operating System windows 7/8/10		
Learning Competency: Install Operating System (OS) in accordance with established installation procedures and to comply with end-user requirements. **TLE_IACSS9-12ICCS-IIa-j-30**		
References :https://www.slideshare.net/ZoleZimbabwe/lesson-8-installing-and-configuring-computer-system		LAS No.: 10

PERFORMANCE TASK (15 points)

Install and Configure Windows 7 Operating System

Follow and observe the Flow chart below.



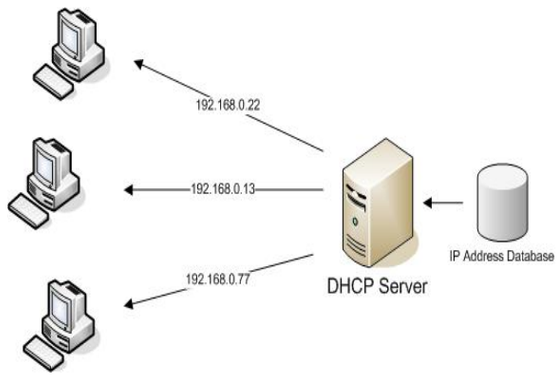
RUBRICS: Rubrics for install and configure windows 7 OS (15 points)

	Poor(5)	Fair(10)	Good(15)	Total
Install Operating System Correctly, install and configure windows 7 OS	Student was unable to successfully install the appropriate Operating System	Student was unable to successfully install the appropriate Operating System on the PC without close guidance and assistance	Student was able to successfully install the appropriate Operating System, with very little supervision and guidance	

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Introduction To Dynamic Host Configuration Protocol (DHCP) Server		
Learning Competency : Install and update required modules/add-ons on NOS installation procedures TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38 Enabling Skills: Explain how Dynamic Host Configuration Protocol (DHCP) server works.		
References : http://tiny.cc/lhmx9y http://tiny.cc/fqmx9y http://tiny.cc/xlmx9y http://tiny.cc/irmx9		LAS No.: 11

CONCEPT NOTES

- **Dynamic Host Configuration Protocol (DHCP)** – is a network protocol that can be used to configure network devices to enable communication of these devices over a computer network.
- It also distributes dynamic IP addresses to hosts on the network.



Components of DHCP

1. **DHCP Server** - A networked device, typically a computer or router, running the DCHP service that holds IP addresses and related configuration information.
2. **DHCP Client** – It is a device that receives configuration information from a DHCP Server. This can be a computer or mobile device.
3. **IP address pool** - The range of IP addresses that are available to DHCP clients.
4. **Lease** - The length of time for which a DHCP client holds the IP address information.

EXERCISES. ESSAY. Explain in at least three sentences how Dynamic Host Configuration Protocol (DHCP) server works.

Rubric:

Content - 5
Relevance - 5

Total: 10

Answer:

_____
_____
_____
_____
_____
_____
_____
_____

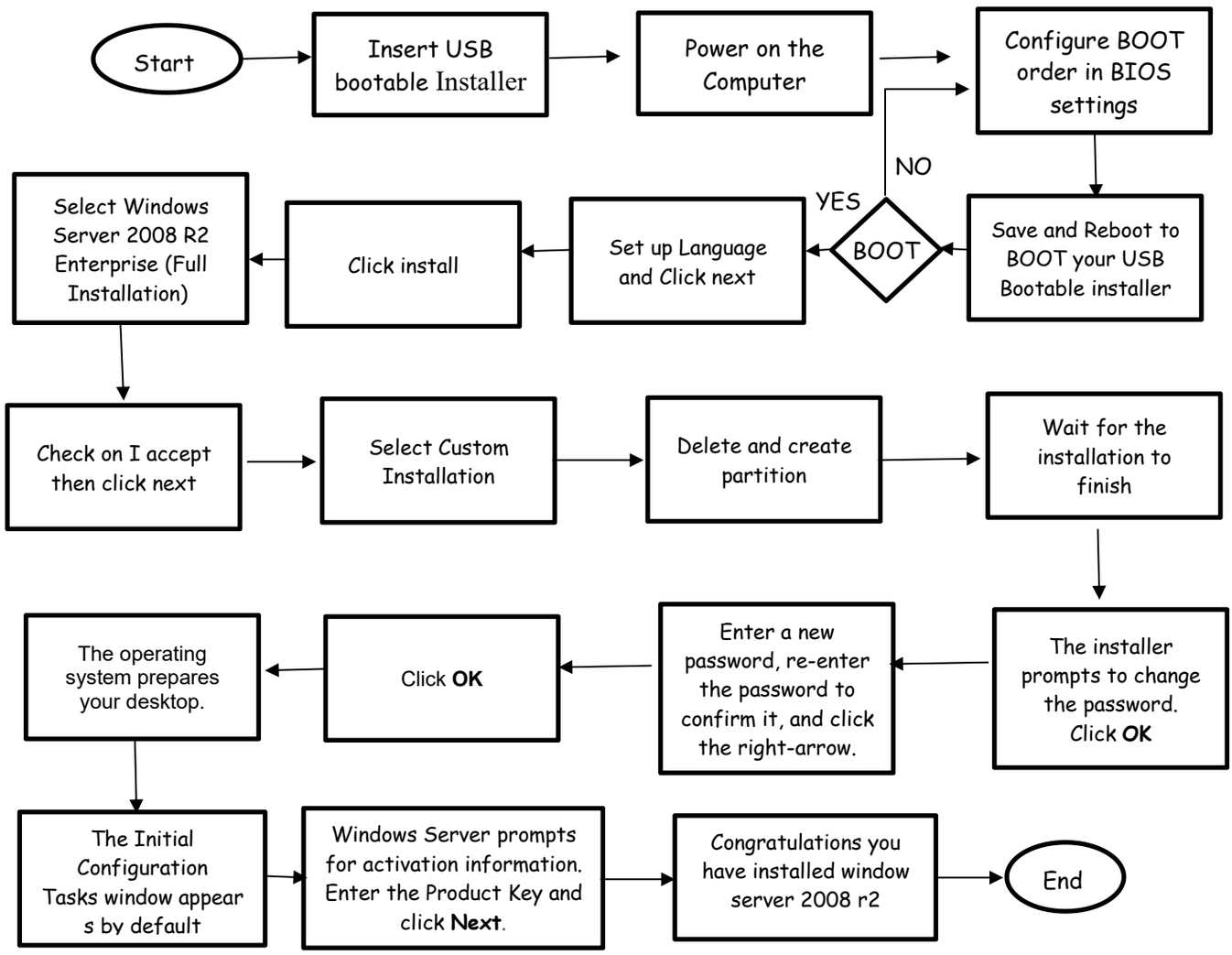
Image URL: http://tiny.cc/fqmx9y

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Installation of Operating System Windows Server 2008 R2		
Learning Competency: Install Operating System (OS) in accordance with established installation procedures and to comply with end-user requirements. **TLE_IACSS9-12ICCS-IIa-j-30**		
References:https://www.blackbaud.com/files/support/infinityinstaller/content/installermaster/tkinstallwindowsserver2008r2.htm		LAS No.: 11

PERFORMANCE TASK (15 points)

Install and Configure Windows Server 2008 R2

Follow and observe the Flow chart below.



RUBRICS: Rubrics for Install and Configure Windows Server 2008 R2 (15 points)

	Poor(5)	Fair(10)	Good(15)	Total
Install and configure window server 2008 r2 Correctly.	Student was unable to successfully install the appropriate Operating System	Student was unable to successfully install the appropriate Operating System on the PC without close guidance and assistance	Student was able to successfully install the appropriate Operating System, with very little supervision and guidance	

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Adding And Configuring Server Roles (DHCP)		
Learning Competency : Install and update required modules/add-ons on NOS installation procedures (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References : http://tiny.cc/btrx9y http://tiny.cc/qurx9y		LAS No.: 12

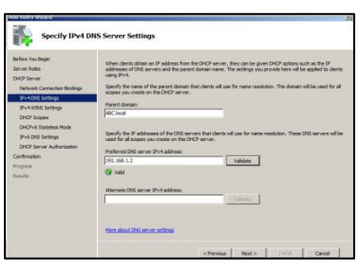
PERFORMANCE TASK

Perform the following steps on how to install DHCP in Windows Server 2008 R2.

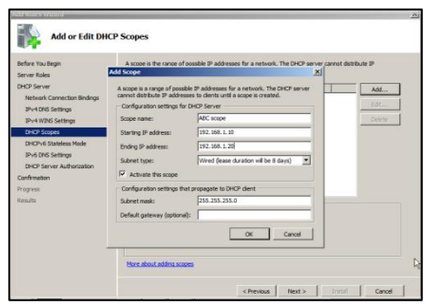
Note: ADDS and DNS must be installed already in your server.

1. Open **Server Manager**.
2. Click **Add Roles**.
3. In the **Before You Begin** screen, click **Next**.
4. The **Select Server Roles** screen appears. Click DHCP Server then click **Next**.
5. In the **Introduction to DHCP Server** information screen, click **Next**.
4. You'll want to select the network connection to bind the DHCP protocol to. In default, the IP address of the server is checked. Click **Next**
5. Type the IP address of your DNS Server in the **Preferred DNS server IPv4 address** box. Click **Validate**.

Note: Be careful not to put the loopback address (127.0.0.1) as this will be the address your clients will go to for name resolution.



6. In the **Specify IPv4 WINS Server Settings**, the first option is selected in default. Click **Next**.
7. In the **Add or Edit DHCP Scopes** screen, click the **Add** button.
8. In the **Add Scope** screen, fill up the following:
   - Scope name
   - Starting IP address
   - Ending IP address
   - Subnet mask
   - IP address of default gateway



9. Click **Ok**.
10. In the **Installation Results** screen, Click **Close**.

RUBRIC FOR THE PERFORMANCE OUTPUT

Work independently	**- 5**
Accuracy of work	**- 10**
Follows safety procedures	**- 5**
	Total: 20

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Install And Configure Of Peripherals Devices		
Learning Competency: Install peripherals/ devices in accordance with manufacturer's instructions and/ or OS installation procedures. **TLE_IACSS9-12ICCS-IIa-j-30** Enabling Skills: Enumerate the Peripherals/ Devices in accordance with the manufacturer's instruction on Installation Process		
References: https://www.examcollection.com/certification-training/a-plus-install-configure-computer-peripheral-devices.html https://www.kisspng.com/png-multi-function-printer-printing-icon-cartoon-print-251508/ https://www.examcollection.com/certification-training/a-plus-install-configure-computer-peripheral-devices.html https://en.wikipedia.org/wiki/Plug_and_play		LAS No.: 12

CONCEPT NOTES

Install and Configure Of Peripherals Devices

The Peripheral Devices are those devices which are connected to the computer and it helps the computer function. A **Plug and Play** (PnP) device or **Computer Bus** is one with a specification that facilitates the discovery of a hardware component in a system without the need for physical device configuration or user intervention in resolving resource conflicts.

https://www.examcollection.com/certification-training/a-plus-install-configure-computer-peripheral-devices.html

Input Devices: (Plug and Play)

Mouse: This is one of the most common device that one would find in a desktop. It is normally plugged with the USB connection.

Keyboard: This is the famous device that is being used today and it is connected through a USB connection at the back of the computer.

https://www.kisspng.com/png-multi-function-printer-printing-icon-cartoon-print-251508/

Output Devices:

Printers: This device creates hard copies of the content displayed on your computers display this can be as simple as printing a note from your word processor.

Speakers: The sound in most PCs which is generated by a pair of stereo speakers connected to the PC by a small lime green jack.

Display devices: The most common display device is your PC or laptop monitor. These devices are capable of displaying the content in a variety of sizes and color depths as required by the user.

EXERCISE: ENUMERATION & DEFINITION. Enumerate the **Common Peripheral Devices** and be able to define each in your own words.

Input:	Output:
1.	1.
2.	2.

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SHARED OPTIONS
SENIOR HIGH ALTERNATIVE RESPONSIVE EDUCATION DELIVERY
GRADE 12 LEARNING ACTIVITY SHEET

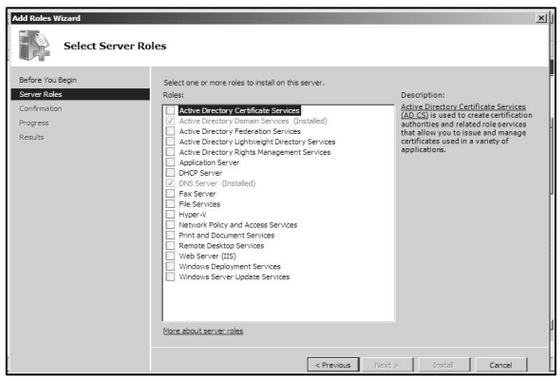
Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Adding Server Roles (File Services)		
Learning Competency : Install and update required modules/add-ons on NOS installation procedures (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References : www.facebook.com/itsmeismael		LAS No.: 13

PERFORMANCE TASK

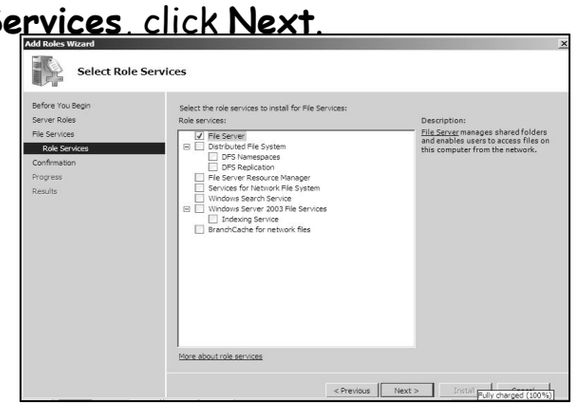
A. Tools, Materials, and Equipment
Desktop Computer
Windows Server 2008 R2

B. Steps/Procedure:
How To Install File Services

1. Open **Server Manager**.
2. Click **Add Roles**.
3. In the **Before You Begin** information screen, click **Next**.
4. In the **Select Server Roles** screen, click **File Services**.



5. Click **Next**.
6. In the **Select Role Services**, click **Next**.



7. Click **Install**.
8. Click **Close**.

RUBRICS FOR THE PERFORMANCE OUTPUT:

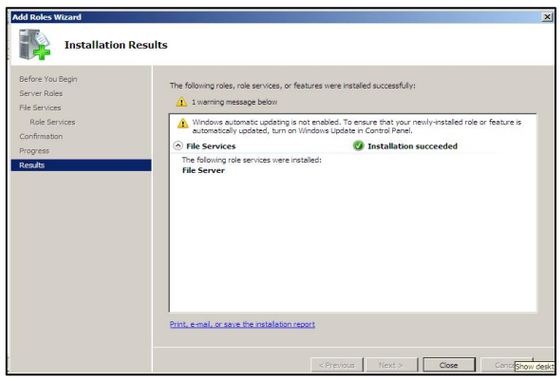
Work independently	**- 5**
Accuracy of work	**- 10**
Follows safety procedures	**- 5**
Total	**20**

Total: 20

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Adding Server Roles (File Services)		
Learning Competency : Install and update required modules/add-ons on NOS installation procedures (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References : www.facebook.com/itsmeismael		LAS No.: 13

Accuracy of work - 10
Follows safety procedures - 5

Total: 20



Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Install And Configure Of Peripherals Devices (Printer)		
Learning Competency: Install peripherals/ devices in accordance with manufacturer's instructions and/ or OS installation procedures. **TLE_IACSS9-12ICCS-IIa-j-30**		
References: https://www.dummies.com/computers/for-seniors-how-to-install-a-printer-for-your-computer/		LAS No.: 13

PERFORMANCE TASK (15 points)

Install a peripheral device (Printer) by following the steps below:

1. Read the instructions that came with the printer.
2. Click **Start** then click **Devices and Printers**.
3. In the Devices and Printers window that appears, click the **Add a Printer** link near the top.
4. In the Add Printer dialog box, click the **Add a Local Printer** option and click **Next**.
5. Click the down arrow on the **Use an Existing Port** field and select a port, or just use the recommended port setting that Windows selects for you. Click **Next**.
6. Choose a manufacturer and then choose a printer model.

   You then have two options:

   6.1 If you have the manufacturer's disc, insert it in the appropriate CD drive now and click the **Have Disk** button. **Click Next**.

   6.2 If you don't have the manufacturer's disc, click the **Windows Update** button to see a list of printer drivers that you can download from the Microsoft Web site. Click **Next**.

7. In the resulting Type a Printer Name dialog box, enter a printer name. Click **Next**.
8. Click **Finish** to complete the Add Printer Wizard

RUBRICS: Rubrics for Installing Peripheral Device (printer). (15 points)

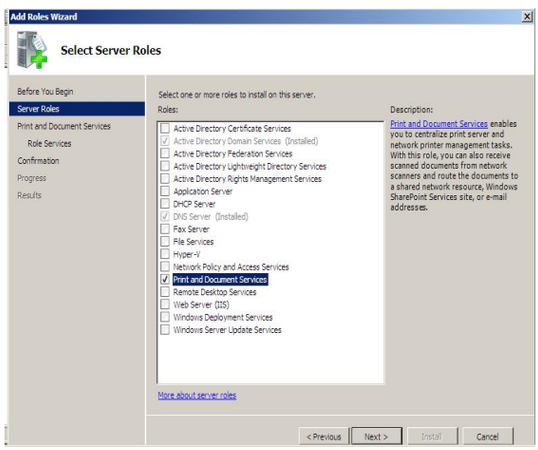
	Poor 5	Fair 10	Good 15	Total
Install peripherals Correctly (Printer)	Student was unable to successfully install the peripherals Correctly (Printer)	Student was unable to successfully peripherals Correctly (Printer) on the PC without close guidance and assistance	Student was able to successfully install the peripherals Correctly (Printer), with very little supervision and guidance	

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Adding Server Roles (Print and Document Services)		
Learning Competency : Install and update required modules/add-ons on NOS installation procedures (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References : http://tiny.cc/w9naaz		LAS No.: 14

PERFORMANCE TASK

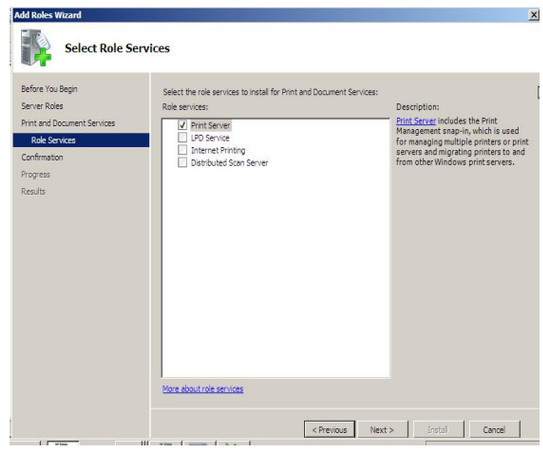
How To Install Print and Document Services

1. Open **Server Manager**.
2. Click **Add Roles**.
3. In the **Before You Begin** information screen, click **Next**.
4. In the **Select Server Roles** screen, click **Print and Document Services**. Click **Next**.

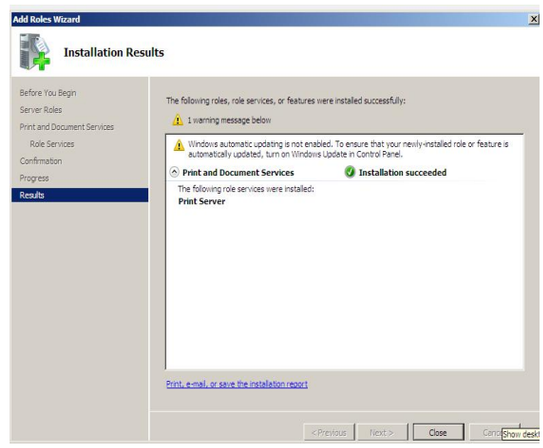


5. In the next information screen, click **Next**.

6. In the **Select Role Services**, click the **Next** button.



7. Click **Install**.
8. Click **Close**.



RUBRICS FOR THE PERFORMANCE OUTPUT

Work independently	**- 5**
Accuracy of work	**- 10**
Follows safety procedures	**- 5**
	Total: 20

For image source, please refer to Annex 6

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Adding Server Roles (Print and Document Services)		
Learning Competency : Install and update required modules/add-ons on NOS installation procedures (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References : http://tiny.cc/w9naaz		LAS No.: 14

Rubric:

Work independently - 5
Accuracy of work - 10
Follows safety procedures - 5

Total: 20

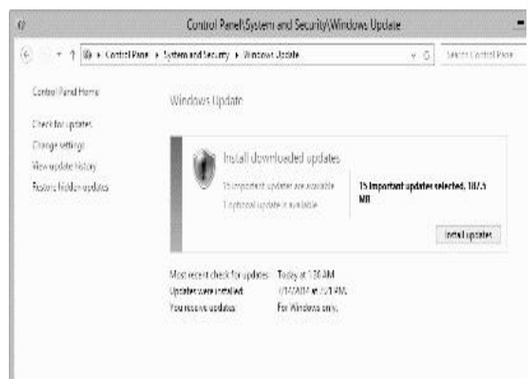
For image source, please refer to Annex 6

Name:	Date:	Score:
Subject : Computer Systems Servicing NC II		
Lesson Title : Install /Update Operating System		
Learning Competency: Install OS and drivers updates/ patches in accordance with manufacturer's recommendations and requirements. **TLE_IACSS9-12ICCS-IIa-j-30** Enabling Skills: Enumerate the steps in updating Windows OS		
References: https://its.uiowa.edu/support/article/1418 https://blogs.technet.microsoft.com/rmilne/2014/10/24/doh-windows-update-has-navigation-tabs/ https://www.lifewire.com/what-is-windows-update-2624597		LAS No.: 14

CONCEPT NOTES

Windows Update is a free Microsoft service that is used to provide updates like service packs and patches for the Windows operating system and other Microsoft software. Windows Update can also be used to update drivers for popular hardware devices. Patches and other security updates are routinely released through Windows Update on the second Tuesday of every month — it's called Patch[1].

The following are steps to update your Windows 7, 8, 8.1, and 10 Operating System:



1. Click the **Start** button in the lower left corner. In the search box, type **Update**, and then, in the list of results, click either **Windows Update** or **Check for updates**.
2. Click the **Check for updates** button and then wait while Windows looks for the latest updates for your computer.
3. If you see a message telling you that important updates are available, or telling you to review important updates, click the message to view and select the important updates to install.
4. In the list, click the important updates for more information. Select the check boxes for any updates that you want to install, and then click **OK**.
5. Click **Install updates**.

Note: It is important that you do not shut down your computer or allow it to run out of battery during the update process. Doing so can cause a corruption of the operating system, which can often only be fixed by reformatting the computer.

EXERCISE: Enumeration. Enumerate the steps in updating windows OS

1.
2.
3.
4.
5.

[1] https://www.lifewire.com/what-is-windows-update-2624597

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Group Policy Management		
Learning Competency : Confirm network services based on user/system requirements (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38) Enabling Skill: Identify the concepts on Group Policy		
References : http://tiny.cc/daxx9y http://tiny.cc/acxx9y http://tiny.cc/bdxx9y		LAS No.: 15

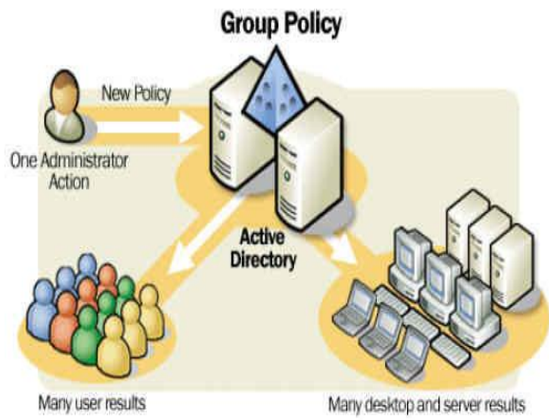
CONCEPT NOTES

Group Policy

- is a feature of the Microsoft Windows family of operating systems that control the working environment of user accounts and computer accounts.
- provides the centralized management and configuration of operating systems, applications, and users' settings in Active Directory environment.

Requirements for using Group Policy

1. ADDS must be installed in the server
2. Computers must be joined to the domain and users must use domain credentials to log on to their computers
3. Permission to edit Group Policy in the domain



Where does the Policy apply?

Policies can be applied on:

- Computers
- Users

Group Policy Object

- It is a collection of settings that define what a system will look like and how it will behave for a defined group of users.
- It is associated with selected Active Directory containers, such as sites, domains, or organizational units (OUs).

EXERCISES: FILL IN THE BLANK. Fill in each blank with its correct answer. Write your answer on the space provided before each number.

_____1. It is the server role that must be installed first in a server before group policy can be used.

_____2. It is a collection of settings that define how a system will behave for a defined group of users.

_____3. It provides the centralized management and configuration of operating systems, applications, and users' settings in Active Directory environment.

_____4 - 5. These are the objects where group policy can be applied to.

Image URL: http://tiny.cc/fgxx9y

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Types Of Software		
Learning Competency: Install Application Software based on software installation guides, end-user requirements and software license agreement. **TLE_IACSS9-12ICCS-IIIa-e-31** Enabling Skills: Enumerate the types of Software and its examples		
References: https://www.slideshare.net/erictalamisan/css-nc-ii-module-core-1-install-configure-computer-systems https://www.defit.org/application-software/		LAS No.: 15

CONCEPT NOTES

Software Packages and use of Application Programs

Software is the component of a computer system which refers to the set of instructions written in a code that computers can understand and execute. Another name for this instruction is Program.

3 Types of Software

1. System Software (Operating System)
2. Application Software
3. Programming Language

System Software -System software refers to the files and programs that make up your computer's operating system.

Application Software – This is generally a program or collection of programs used by end users. It can be called an application or simply an app.[1]

Common application software are the following:

Word Processor- is a software program capable of creating, storing, and printing typed documents

Spreadsheets – word processor is a software program capable of creating, storing, and printing typed documents

Presentation Software- is a software package used to display information in the form of a slide show.

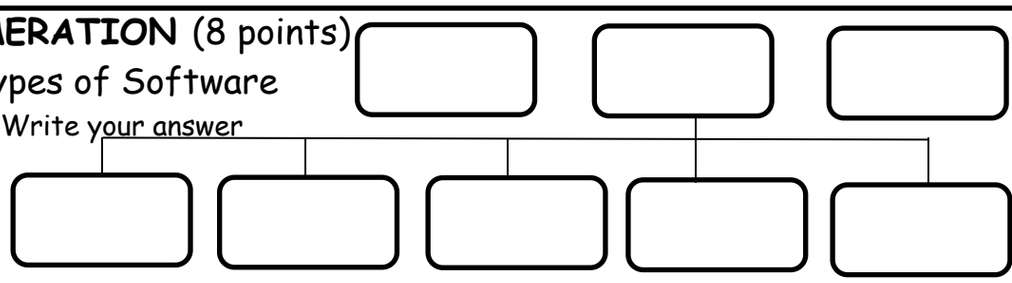
Desktop Publishing Software- is a tool for graphic designers and non-designers to create visual communications such as brochures, business cards, greeting cards, web pages, posters, and more for professional or desktop printing as well as for online or on-screen electronic publishing.

Database Programs- is a software program or utility used for creating, editing and maintaining database files and records.

Programming Software- This is a program or set of programs which helps the software developers by assisting them in creating, debugging and maintaining other programs and applications.

EXERCISE: ENUMERATION (8 points)

Enumerate the 3 types of Software and provide an example. Write your answer inside the box.



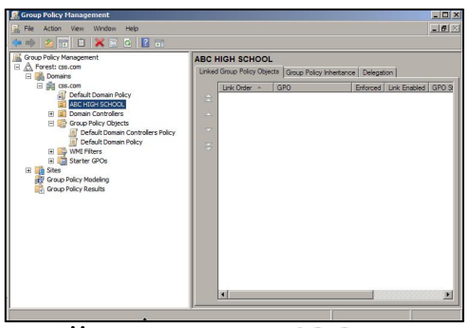
[1] https://www.defit.org/application-software/

Name:	Date:	Score:
Subject : Computer Systems Servicing		
Lesson Title : Adding Group Policy Object in Group Policy Management Console		
Learning Competency : 2.4 Check operation of network services based on user/system requirements (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References : http://tiny.cc/9rw79y		LAS No.: 16

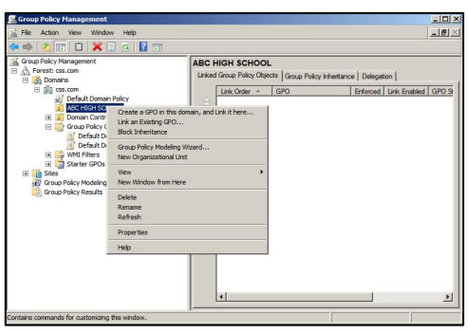
PERFORMANCE TASK

Equipment:
Desktop Computer (OS: Windows Server 208 R2)

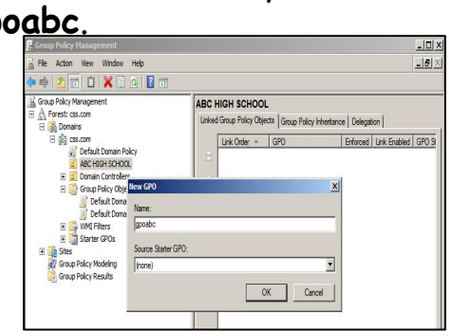
1. Click **Start**.
2. Select **Administrative Tools**.
3. Click **Group Policy Management**.
4. In the left pane of **Group Policy Management Console (GPMC)**, expand **Forest**.
5. Expand **Domains**.
6. Expand the domain name. In this example, our domain is css.com.



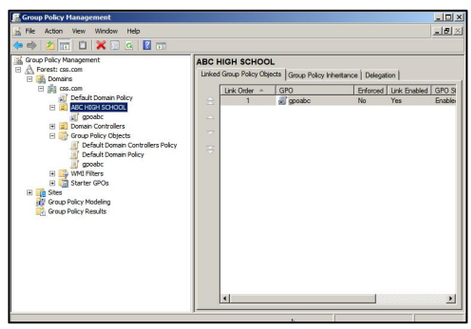
7. We will create a GPO on our AD object **ABC HIGH SCHOOL**. Right-click on that object then click **Create a GPO in this domain and Link it here…**



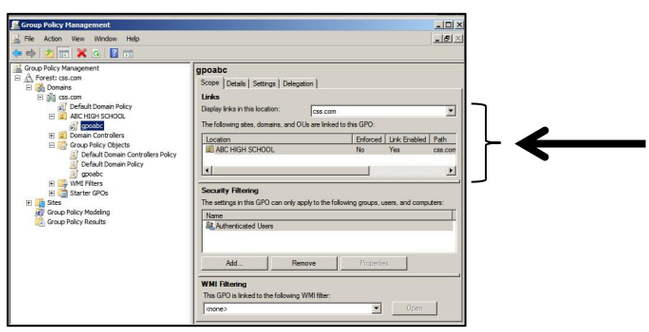
8. Type the name of your GPO. We will use **gpoabc**.



9. Click the **OK** button.
10. You will see the GPO under the AD object. The GPO **gpoabc** is now linked to your AD object **ABC HIGH SCHOOL**.



11. To check if the GPO is already linked to the domain and OU, click the **GPO**.
- In the **Scope** tab, you should see the following details:



Rubric

Work independently	- 5
Accuracy of work	- 10
Follows safety procedures	- 5
Total:	**20**

For image source, refer to Annex 6

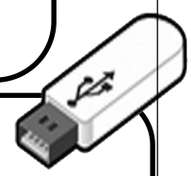
Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Installation Of Applications Software With Different Variations		
Learning Competency: Install Application Software based on software installation guides, end-user requirements and software license agreement. **TLE_IACSS9-12ICCS-IIIa-e-31**		
References: https://www.computerhope.com/issues/ch000561.htm http://wrozkalodz.com.pl/images/?C=M;O=A https://toppng.com/usb-flash-drive-PNG-free-PNG-Images_23664		LAS No.: 16

PERFORMANCE TASK

INSTRUCTION: Install the application software in different variations. Follow the steps given below: (15 points)

How to install from a CD or DVD

installation



How to install from a USB flash drive

assigned to your USB flash drive.

file icon to start the setup process.

How to install from a Download

start the setup process.

file's contents before setup can begin.

RUBRICS: Rubrics for installation of application software with different variations. (15 points)

	Poor(5)	Fair(10)	Good(15)	Total
Install application software in different variation	Student was unable to successfully install application software in different variation	Student was unable to successfully install the appropriate application software in different variation	Student was able to successfully install the appropriate application software in different variation	

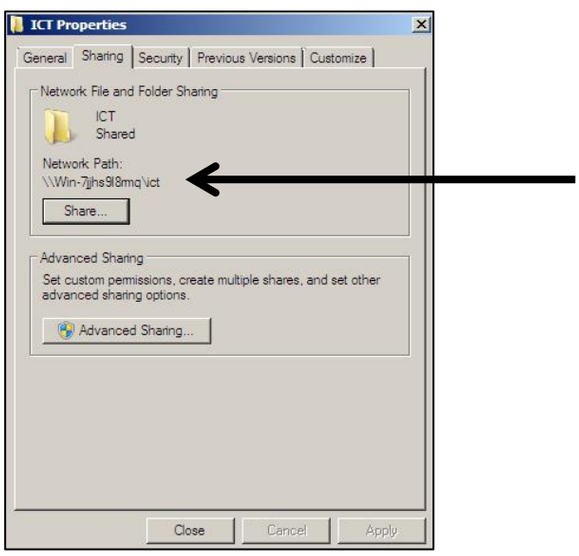
Name:	Date:	Score:
Subject : TVL – ICT - Computer Systems Servicing		
Lesson Title : Folder Redirection		
Learning Competency : Confirm network services based on user/system requirements (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References : : http://tiny.cc/9rw79y		LAS No.: 17

PERFORMANCE TASK

Note: We will be using a group policy object for this activity. Refer to the lesson **Group Policy Management** in creating a group policy object.

How To Set Up Folder Redirection

*1. Create a folder in the server for file container. We will create a folder named **ICT** in drive C.*
*2. Right-click in **ICT folder** then click **Properties**.*
*3. Click **Sharing** tab.*
*4. Click the **Share** button.*
*5. Click the drop down arrow. Choose **Everyone** then click the **Add** button.*
*6. Set the permission level to **Read/Write**.*
*7. Click the **Share** button.*
*8. Click **Done**.*
*9. Copy the **Network Path**. This will be used in redirecting a folder.*



Rubric FOR PERFORMANCE OUTPUT

Work independently	- 5
Accuracy of work	- 10
Follows safety procedures	- 5
Total: 20	

Rubric:

How To Redirect A Folder

1. Go to the **group policy object** you created.
- Open **Server Manager**
- Expand **Features** by clicking (+).
- Expand **Group Policy Management**.
- Expand **Forest**
- Expand **Domains**
- Expand the domain
- Expand the organizational unit.
2. Right-click on the group policy object then click **Edit**. The **Group Policy Management** will open.
3. Expand **User Configuration**.
4. Expand **Policies**.
5. Expand **Windows Settings**.
6. Expand **Folder Redirection**.
7. Under Folder Redirection, right-click on **Documents** then click on **Properties**.
8. In **Target** tab, you can specify the location of the Documents folder. Click the dropdown arrow then choose **Basic**.
9. Paste the network path in the **Root Path** box.
10. Click **Settings** tab.
11. Under **Select the redirection settings for Documents**, select the second and third checkbox.
12. Click the **Apply** button.
13. When the **Warning** message appears, click **YES**.
14. Click the **Ok** button.
15. Open command prompt then type **gpupdate /force**.
16. Once you see the message **Ok to logoff?**, press **Y**.
17. The server will restart.
18. Do the same thing with the client.

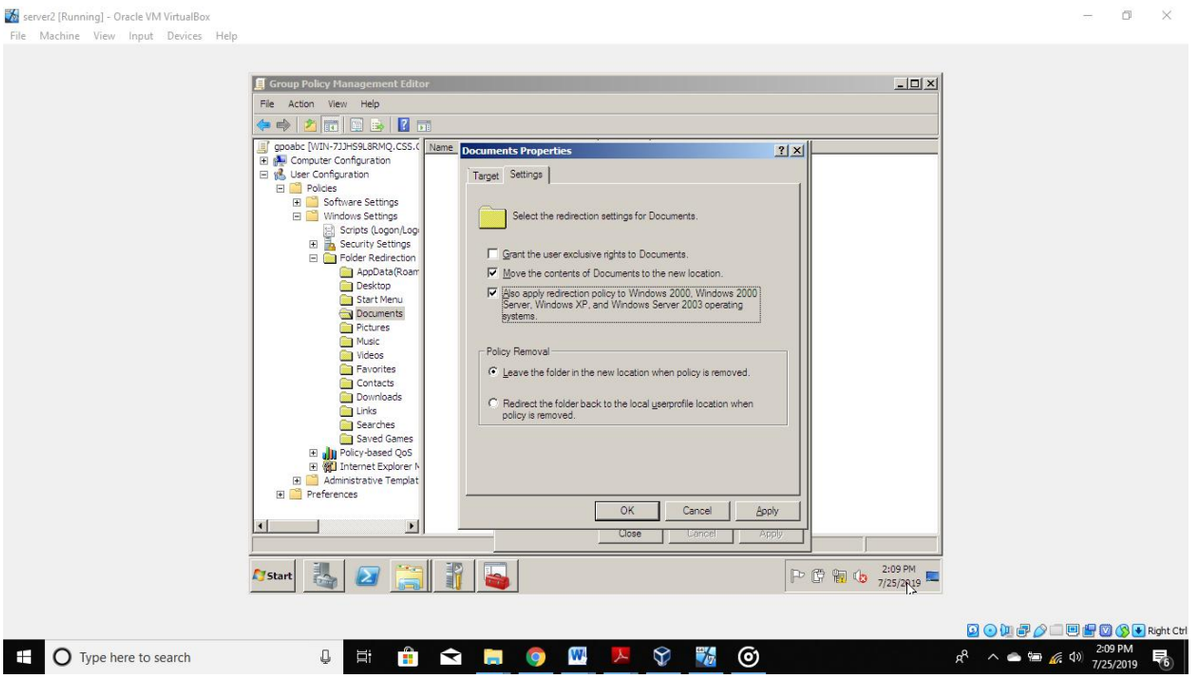
For image source, refer to Annex 6

Name:	Date:	Score:
Subject : TVL – ICT - Computer Systems Servicing		
Lesson Title : Folder Redirection		
Learning Competency : Confirm network services based on user/system requirements (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References : : http://tiny.cc/9rw79y		LAS No.: 17

Work independently - 5
Accuracy of work - 10
Follows safety procedures - 5
Total: 20

For image source, refer to Annex 6

Name:	Date:	Score:
Subject : TVL – ICT - Computer Systems Servicing		
Lesson Title : Folder Redirection		
Learning Competency : Confirm network services based on user/system requirements (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References : : http://tiny.cc/9rw79y		LAS No.: 17



For image source, refer to Annex 6

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Antivirus / Diagnostic Software		
Learning Competency: Carry out variation to application software in accordance to customer/ client requirements. **TLE_IACSS9-12ICCS-IIIa-e-31** Enabling skills: Identify the Variation of Application Software in accordance to customer/ client requirements		
References: https://searchsecurity.techtarget.com/definition/antivirus-software https://www.123rf.com/clipart-vector/antivirus.html?sti=n8ahke3oz7e1hyusqp| https://www.gograph.com/illustration/laptop-with-medical-diagnostic-software-gg91602865.html		LAS No.: 17

CONCEPT NOTES:

ANTIVIRUS / DIAGNOSTIC SOFTWARE

Antivirus - is a class of program designed to prevent against a wide variety of threats, including other types of malicious software, such as keyloggers, browser hijackers, Trojan horses, worms, rootkits, spyware, adware, botnets and ransomware, and remove malware infections and viruses on individual computing devices, networks and IT systems[1]..

Diagnostic Software – a diagnostic program is a software tool used to diagnose problems with a particular set of hardware devices. It can be used by a trained technician or by the owner of the device, to identify and resolve hardware issues[2].

What is the difference between Antivirus and Diagnostic Software?
Antivirus Software is a program that locates, identifies, and attempts to remove virus programs that have installed itself on the computer. While **Diagnostic Software** is a program used to find hardware problems on a computer. It helps determine in a timely manner what needs to be fixed or replaced and get the computer working again.

EXERCISE:

Supply the correct word to complete given statements.

1_____ software is a class of program designed to prevent, detect and remove 2_____ infections on individual computing devices, networks and IT systems. It is originally designed to detect and remove 3_____ from computers, can also 4_____ against a wide variety of threats, including other types of malicious software, such as keyloggers, browser hijackers, Trojan horses, worms, rootkits, spyware, 5_____, botnets and ransomware.

[1] https://searchsecurity.techtarget.com/definition/antivirus-software
[2] https://www.computerhope.com/jargon/////d/diagprog.htm

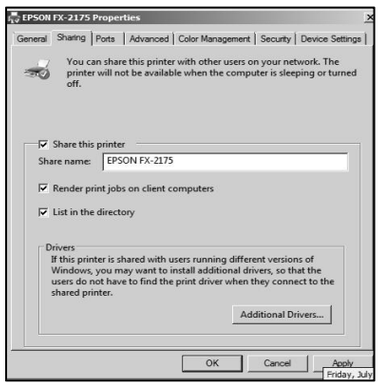
Name:	Date:	Score:
Subject COMPUTER SYSTEMS SERVICING		
Lesson Title : Printer Sharing On A Network		
Learning Competency : Check operation of network services based on user/system requirements (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References :		LAS No.: 18

PERFORMANCE TASK

Tools, Materials, Equipment:
Desktop computer
Windows Server 2008 R2
Printer

How To Share A Printer

1. Click **Start**.
2. In the search box, type **Devices and Printers**.
3. Right-click on the printer icon of the printer you previously installed. Select **Printer Properties**.
4. On the **Sharing** tab, select **Share this printer**, **Render print jobs on client computers**, and **List in the directory**.
5. Click **Additional Drivers**. This is to enable the users with x64 and x86 – based operating systems to use the printer when they connect to the network.



6. Select x86 or x64 then click **OK**.
7. Another dialog box appears. Click **Browse**.
8. Look for the printer installer.
9. Double – click on the **printer installer > Driver > Printer > Driver > WINX86** or **WINX64**.
10. You will see one folder and one file. Click on the file then click **Open**.
11. Click **Ok**.

Rubric for the Performance Output:

Work independently	- 5
Accuracy of work	- 10
Follows safety procedures	- 5
Total:	20

For image source, refer to Annex 6

Name:	Date:	Score:
Subject COMPUTER SYSTEMS SERVICING		
Lesson Title : Printer Sharing On A Network		
Learning Competency : Check operation of network services based on user/system requirements (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References :		LAS No.: 18

Rubric

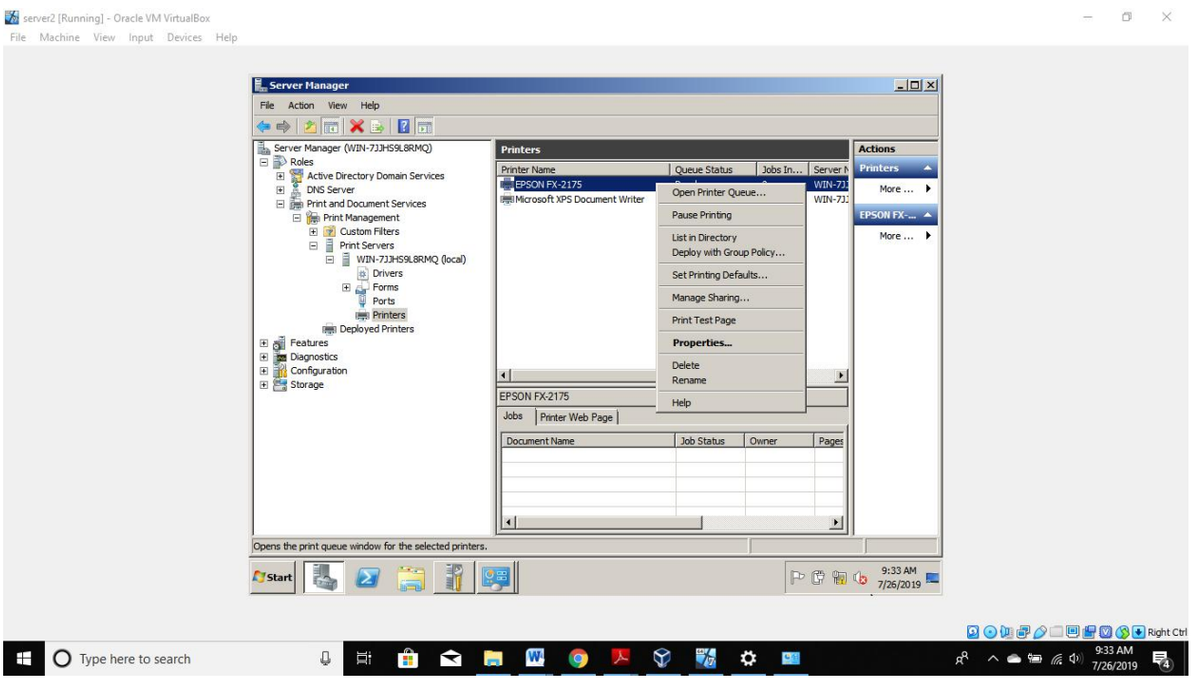
Work independently	- 5
Accuracy of work	- 10
Follows safety procedures	- 5

Total: 20

For image source, refer to Annex 6

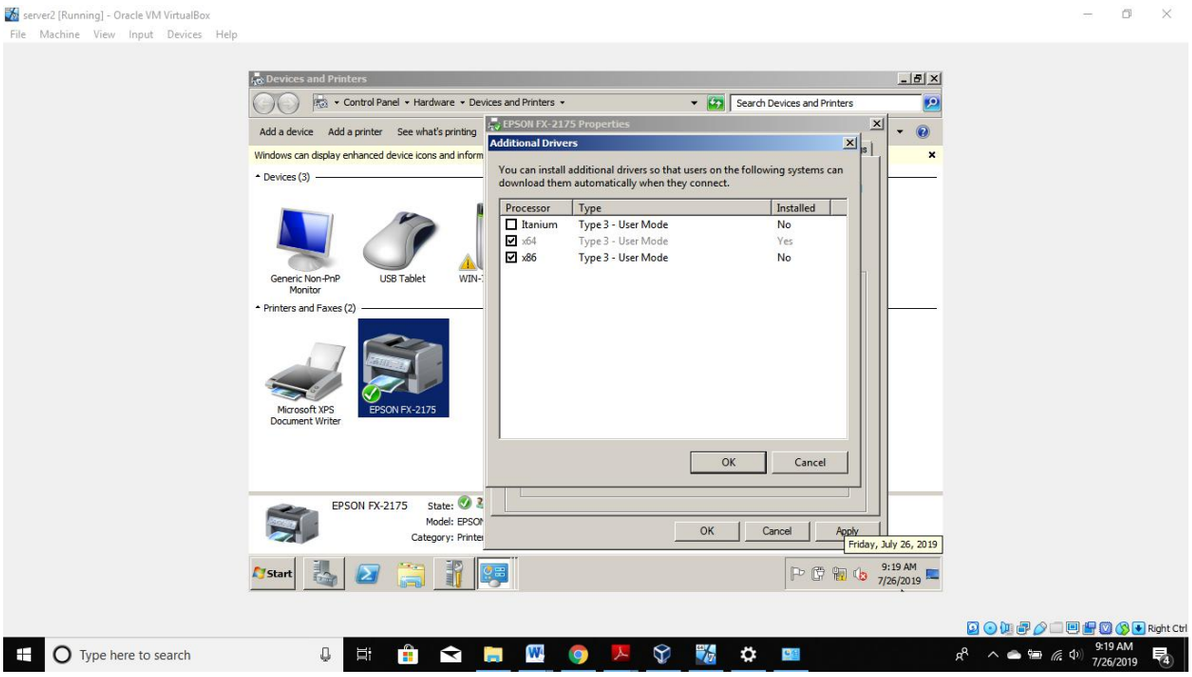
Name:	Date:	Score:
Subject COMPUTER SYSTEMS SERVICING		
Lesson Title : Printer Sharing On A Network		
Learning Competency : Check operation of network services based on user/system requirements (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References :		LAS No.: 18

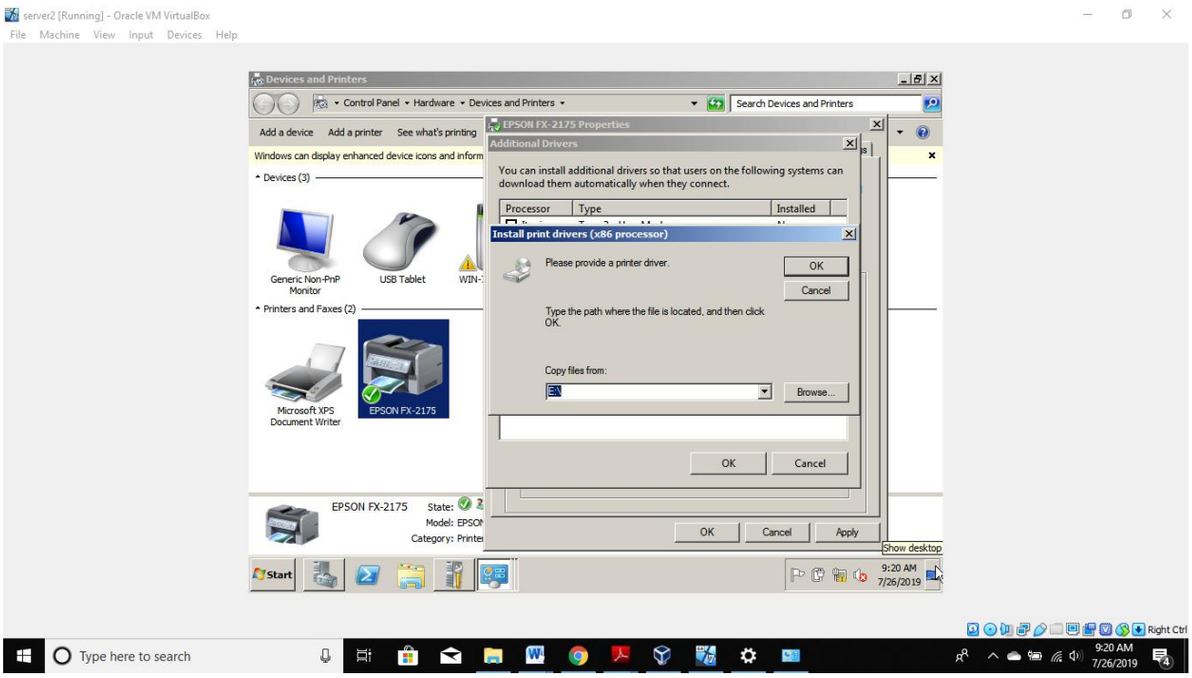
he first thing you need to do is to establish your printer deployment requirements – which users or computers need access to which printers. Ideally to avoid confusion for users you don't want to give them access to printers they will never use, especially if your network is spread over a large building or multiple sites. If you havent done so already then now would be a good time to check that the descriptions and location details of each shared printer are correctly filled out, see Part One for details of how to do this.



For image source, refer to Annex 6

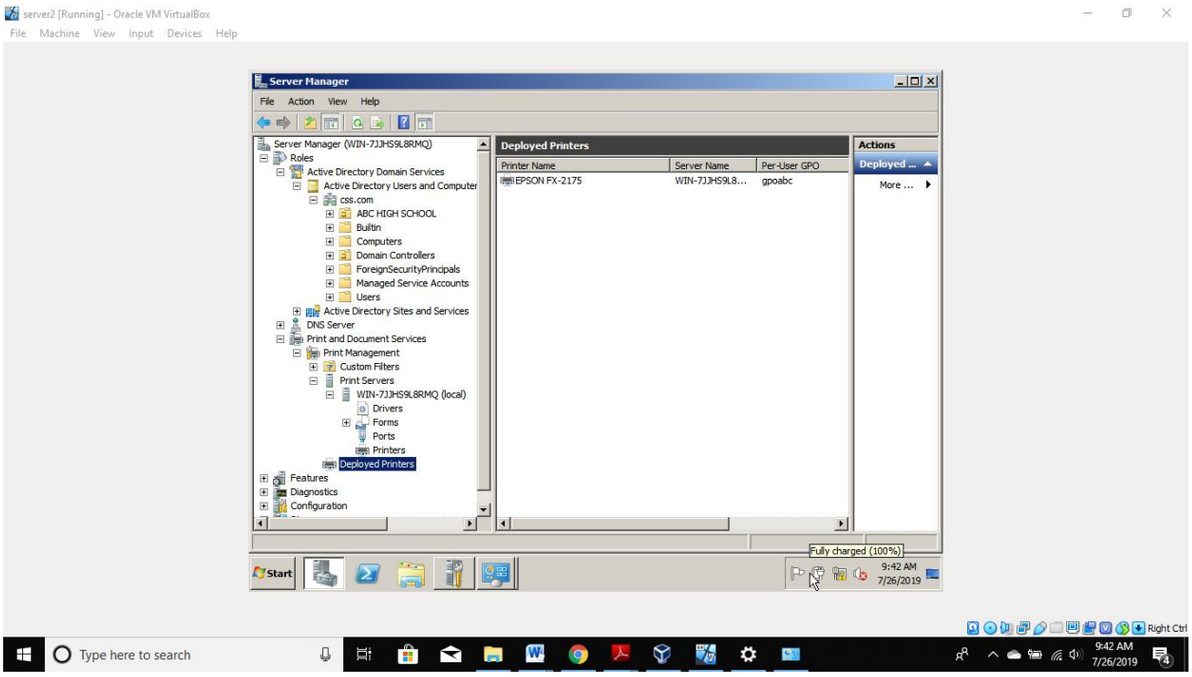
Name:	Date:	Score:
Subject COMPUTER SYSTEMS SERVICING		
Lesson Title : Printer Sharing On A Network		
Learning Competency : Check operation of network services based on user/system requirements (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References :		LAS No.: 18





For image source, refer to Annex 6

Name:	Date:	Score:
Subject COMPUTER SYSTEMS SERVICING		
Lesson Title : Printer Sharing On A Network		
Learning Competency : Check operation of network services based on user/system requirements (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References :		LAS No.: 18



EXERCISES

For image source, refer to Annex 6

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Device Drivers		
Learning Competency: Install software updates in accordance with manufacturer's recommendations and requirements. **TLE_IACSS9-12ICCS-IIIa-e-31** Enabling Skills: Explain the meaning of the different methods of installing device drivers.		
References: https://searchenterprisedesktop.techtarget.com/tip/Device-drivers-Installation-and-configuration		LAS No.: 18

CONCEPT NOTES:

Device Driver

This is commonly known as a **driver.** A device driver or hardware driver is a group of files that enable one or more hardware devices to communicate with the computer's operating system. Without these drivers, the computer would not be able to send and receive data correctly to hardware devices, such that of a printer.

Methods of installing device drivers

***Admins** can install device drivers on a server in four ways.

- ✓ **Running the Setup**. Device drivers are automatically installed for all detected devices during installation of Windows system on the server computer
- ✓ **Starting the Computer**. Whenever the server is started, new devices are detected and their device drivers are automatically installed
- ✓ **Scanning for New Hardware**. Add/Remove Hardware Wizard can be used to perform the hardware-detection process and desired device driver installation
- ✓ **Manual Installation**. You can use the Add/Remove Hardware Wizard to specify the device you want to install, or you can right-click the .INF file that comes with the driver and choose Install.

EXERCISE: DEFINITION. Define the following terms correctly.

1. Driver

   _____

2. Running the Setup

   _____

3. Starting the Computer

   _____

4. Scanning the new Hardware

   _____

5. Manual installation

   _____

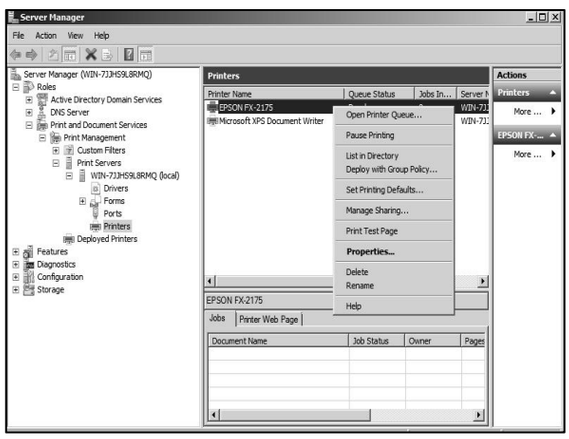
Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Printer Deployment		
Learning Competency : Check operation of network services based on user/system requirements (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References :		LAS No.: 19

PERFORMANCE TASK

A. Tools, Materials, Equipment:
Desktop computer
Windows Server 2008 R2
Printer

How To Deploy A Printer

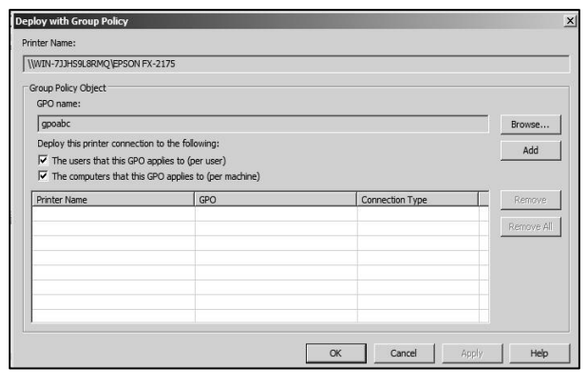
B. Steps/Procedure
1. Open **Server Manager**.
2. Expand **Roles** by clicking (+).
3. Expand **Print and Document Services > Print Management > Print Servers**
4. Expand <Server Name (local)> then click **Printers**. You should see the printer you installed.
5. Right-click on the printer then select **Deploy with Group Policy…**



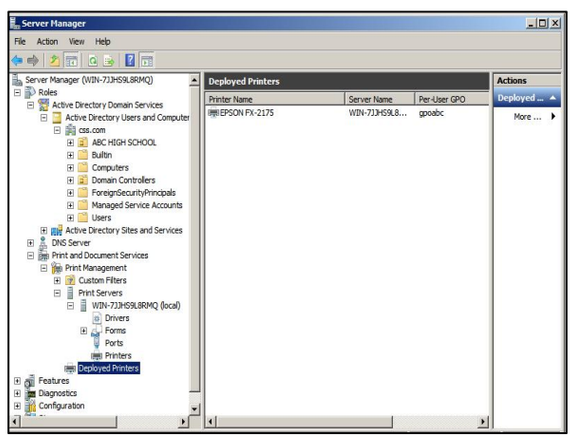
6. Click **Browse**.

7. Under **Domains, OUs and linked Group Policy Objects**, select the **OU**. In this example, click ABC HIGH SCHOOL.css.com. Click **Ok**.
8. Click the **Group Policy Object** (gpoabc) then click **Ok**.

9. Select the two check boxes then click **Add**.



10. Click **Apply**. A new screen appears. Click **Ok**.
11. Click **Ok**.
12. Click **Deployed Printers**. You should now see the printer deployed in the group policy object.



Rubric

Work independently	- 5
Accuracy of work	- 10
Follows safety procedures	- 5
Total:	**20**

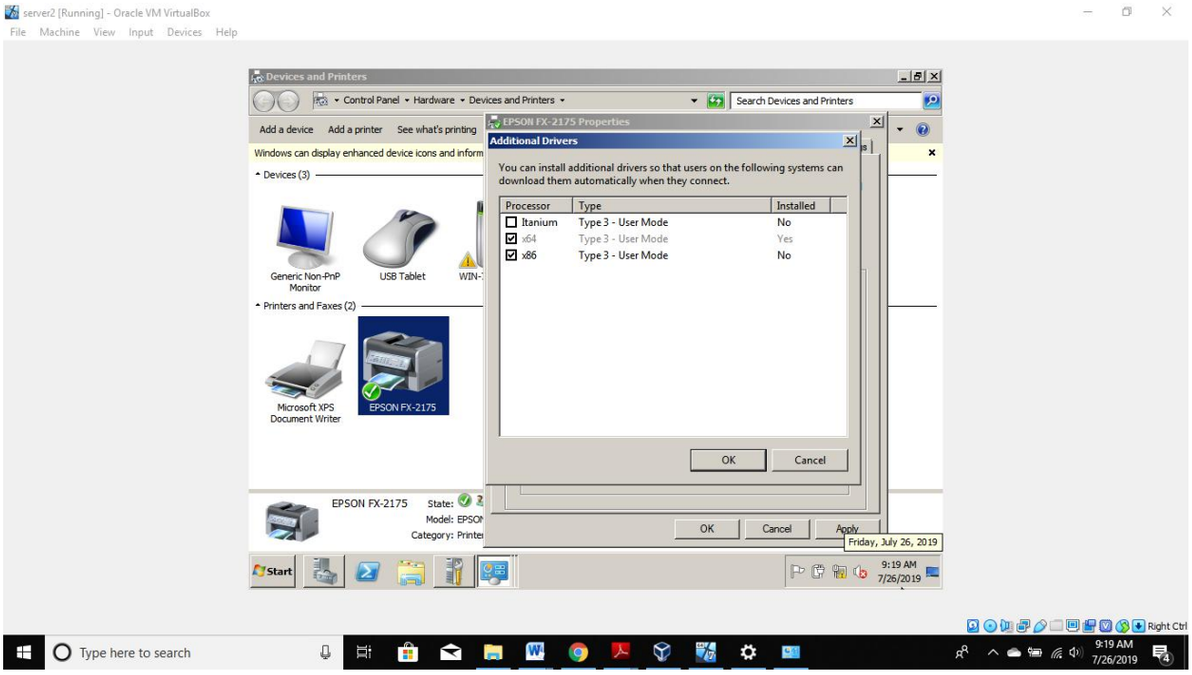
For image source, refer to Annex 6

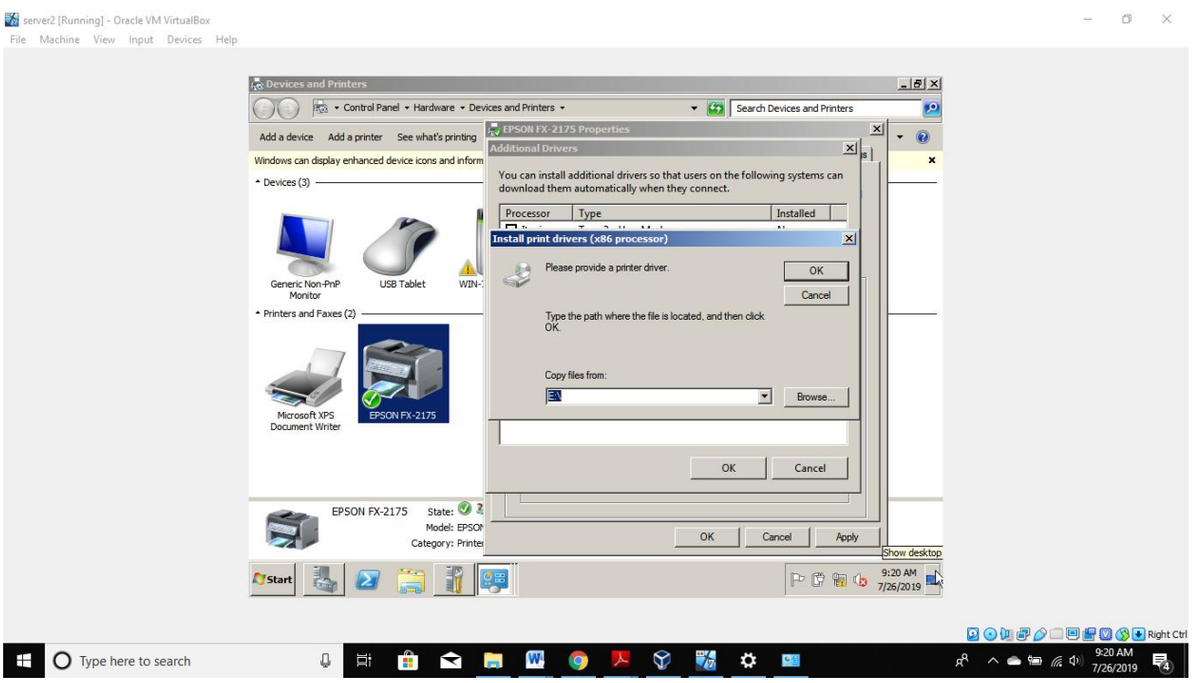
Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Printer Deployment		
Learning Competency : Check operation of network services based on user/system requirements (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References :		LAS No.: 19

he first thing you need to do is to establish your printer deployment requirements – which users or computers need access to which printers. Ideally to avoid confusion for users you don't want to give them access to printers they will never use, especially if your network is spread over a large building or multiple sites. If you havent done so already then now would be a good time to check that the descriptions and location details of each shared printer are correctly filled out, see Part One for details of how to do this.

For image source, refer to Annex 6

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Printer Deployment		
Learning Competency : Check operation of network services based on user/system requirements (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References :		LAS No.: 19





For image source, refer to Annex 6

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Device Drivers (DriverPack)		
Learning Competency: Install software updates in accordance with manufacturer's recommendations and requirements. **TLE_IACSS9-12ICCS-IIIa-e-31**		
References: http://tips.betdownload.com/how-to-install-driver-automatically-by-driverpack-solution-1324n.aspx		LAS No.: 19

PERFORMANCE TASK:

FOLLOW THE STEPS BELOW (25 points)

HOW TO INSTALL DRIVER AUTOMATICALLY BY DRIVERPACK SOLUTION

Step 1: Run to install the program (DrivePack Solution).

Step 2: After you have installed the software, the interface appears.

My computer has a full set of sdrivers, you can download a full set in Download full version, if the computer lacks any driver, it will appear Install button

Step 3: Click Install and update to complete the installation process. Wait to complete the installation process, and after your computer successfully installed all drivers, you can feel free to use other apps for entertainment as well as other programs to serve your work.

RUBRICS:

RUBRICS FOR THE DRIVERPACK INTALLATION (25 points)

PERFORMANCE CRITERIA	SCORING				
	1	2	3	4	5
The system is correctly started.					
The installer is properly inserted.					
Handling and safekeeping of installer is observed					
The instructions how to install device drivers are accurately followed					
The device drivers are successfully installed					
Total Score					

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Connecting The Client To The Domain		
Learning Competency : Check operation of network services based on user/system requirements (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References : http://tiny.cc/6fqaaz		LAS No.: 20

PERFORMANCE TASK

How To Connect the Windows 7 Client To The Domain

A. Set The Dynamic IP address of the client

1. Click **Start**.
2. Right-click on **Network** then click Properties.
3. In the left panel, click **Change Adapter Settings**.
4. Right - click **Local Area Connection**. Click **Properties**.
5. Select **Internet Protocol Version 4 (TCP/IPv4)**. Click **Properties**.

6. Select **Obtain an IP address automatically**. Click **Ok**.

B. Set The Domain Name

1. Click **Start**.
2. Right-click **Computer** then click **Properties**.
3. In the lower right corner of the screen, click **Change settings**.
4. Select **Computer Name** tab.
5. Click the **Change** button.
6. Click **Domain** then type domain name.

7. You will be required to enter the username and password. Type the Administrator credentials then click **Ok**.

8. If the log on is accepted, the message **"Welcome to <name of domain> domain"** appears. Click **Ok**.
9. A message will prompt you to restart your computer. Click **Ok** to restart.
10. After the restart, click **Switch User** in the Windows 7 logon screen.
11. Enter the username and password of one of the users in the domain.

Rubric

Work independently	- 5
Accuracy of work	- 10
Follows safety procedures	- 5
Total:	**20**

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Connecting The Client To The Domain		
Learning Competency : Check operation of network services based on user/system requirements (TLE_IACSS9-12SUCS-IIIf-j-IVa-j-38)		
References : http://tiny.cc/6fqaaz		LAS No.: 20

Rubric:

Work independently - 5
Accuracy of work - 10
Follows safety procedures - 5

Total: 20

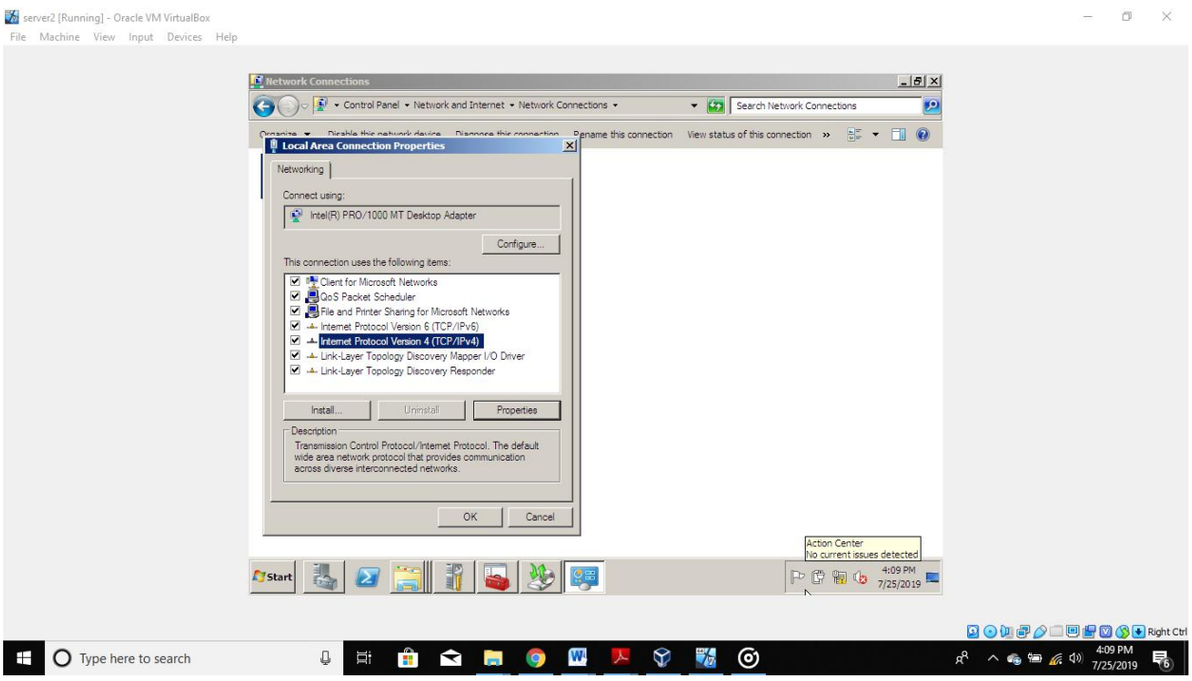


Image URL: http://tiny.cc/6fqaaz http://tiny.cc/qnqaaz

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Testing Installed Equipment/Devices		
Learning Competency: Test devices/ systems and/or installation to determine whether it conforms to requirements. **TLE_IACSS9-12ICCS-IIIf-j-32**		
References: https://www.slideshare.net/ynlcadapan/ict-9-module-3-lesson-3-conducting-test-on-the-installed-computer-system		LAS No.: 20

CONCEPT NOTES:

The most basic test is to switch the system on to check it starts without errors.

PERFORMANCE TASK: (25 points)

Test the following devices if it is Functional or not Functional. Write your observation on the table below.

DEVICE NAME	FUNCTIONAL	NOT FUNCTIONAL	REMARKS
Monitor			
Keyboard			
Mouse			
Printer (if any)			
Speakers			
Others (specify)			

RUBRICS:

RUBRICS FOR THE TESTING DEVICES (25 points)

PERFORMANCE CRITERIA	SCORING				
	1	2	3	4	5
The task is correctly started.					
The instruction is correctly followed.					
Handling and safekeeping of the devices during testing is observed.					
The testing of devices are successfully conducted.					

Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING		
Lesson Title : Testing Procedure (Accessing The Network Printer)		
Learning Competency : Undertake predeployment procedures based on enterprise policies and procedures (TLE_IACSS9-12SUCS-Ia-j-39)		
References : http://tiny.cc/61qaaz		LAS No.: .21

PERFORMANCE TASK

A. Tools, Materials, Equipment

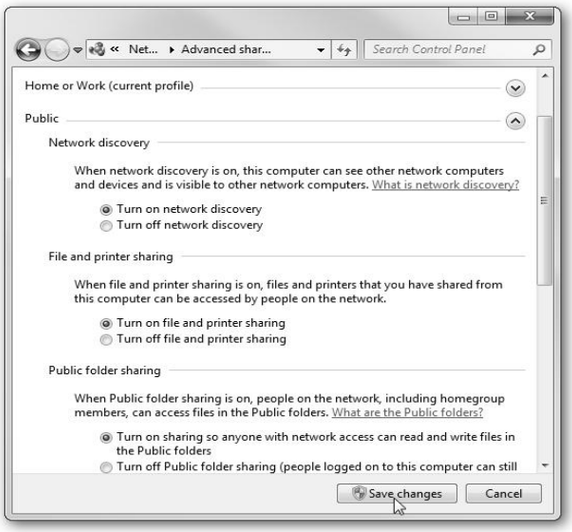
Desktop Computer (Server)
Desktop Computer (Windows 7 Client)
Network Switch
Ethernet cables
Printer

B. Steps/Procedure:

To add the shared printer to the client computer, log on as an administrator and follow the instructions below:

Network Sharing Configuration

1. Click **Start – Control Panel – Network and Internet**.
2. Click **Network and Sharing Center**.
3. Click **Change advanced sharing settings**.
4. Select **Turn on network discovery** and **Turn on file and printer sharing** and then click **Save Changes**.



Printer Driver Installation

1. Click **Start**.
2. In the search box, type \\ followed by the IP address of the server. (Ex: \\192.168.1.2)
3. Right-click on the printer icon then click **Connect**.
4. Print a test page by opening notepad or any word processing program. The network printer should be available.

Rubric:

Work independently	- 5
Accuracy of work	- 10
Follows safety procedures	- 5
Total:	**20**

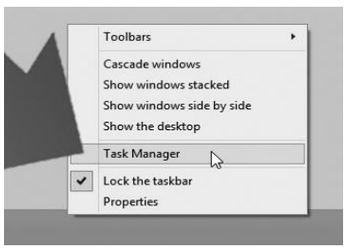
Image URL: http://tiny.cc/61qaaz

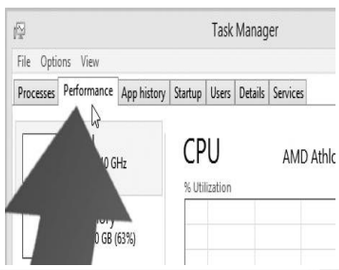
Name:	Date:	Score:
Subject : COMPUTER SYSTEMS SERVICING NC II		
Lesson Title : Stress test - Processor - Memory - Hard Disk - Video Card		
Learning Competency: Conduct stress test to ensure reliability of equipment in accordance with manufacturer's instructions and system requirements. **TLE_IACSS9-12ICCS-IIIf-j-32**		
References: https://www.wikihow.com/Stress-Test-a-Computer		LAS No.: 21

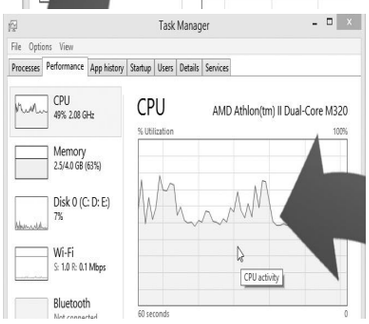
CONCEPT NOTES:

Why **Stress-Test?** Simple: To ensure the reliability and stability of your system.

PERFORMANCE TASK: follow the steps below in conducting Stress Test (20 points)







1. Close all open programs
2. Right click and select task manager.
3. Select the performance tab.
4. Test your computer open as many programs as you can, and watch the task manager for its effect.
5. Watch the just RAM/memory - The graph that is more straight and labelled as some sort of memory is RAM. RAM ranges from 256 MB to 512 MB to 1 GB to 2 GB and even 4 GB. Note: 512 MB is 1/2 GB. If you have KB's of RAM, it's time to upgrade.
6. Repeat the process if you did not read about RAM and CPU first. Close all programs and wait for the CPU to settle.

RUBRICS:

RUBRICS FOR THE STRESS TEST (20 points)

PERFORMANCE CRITERIA	SCORING				
	1	2	3	4	5
The task is correctly started.					
The instruction is correctly followed.					
Handling and safekeeping of the devices during testing is observed.					
The testing of devices are successfully conducted.					
Total Score					