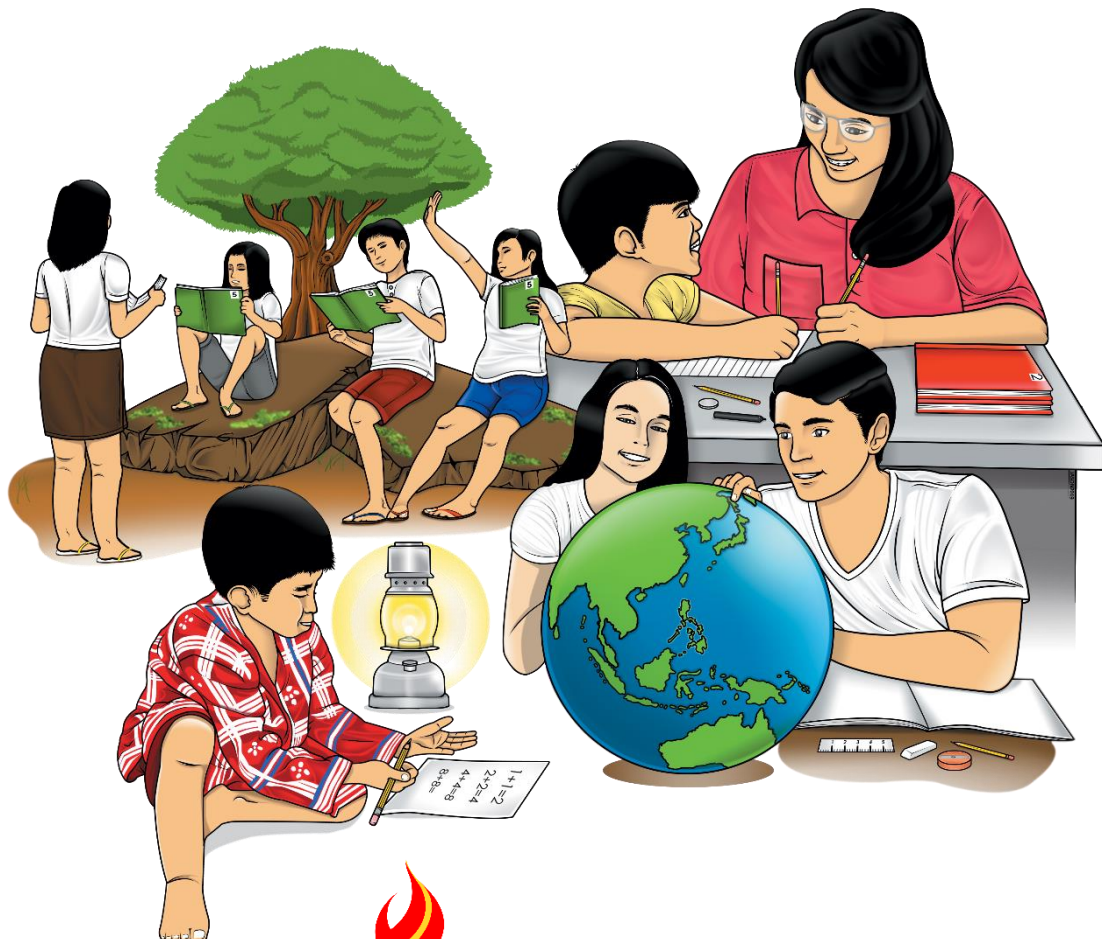


7/8

TLE- EPAS

Quarter 1 – Module 2: PERFORMING COMPUTER OPERATION (PCO)



TLE-EPAS 7/8
Alternative Delivery Mode
Quarter 1 – Module 2: Performing Computer Operation (PCO)
First Edition, 2020

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Published by the Department of Education
Secretary: Leonor Magtolis Briones
Undersecretary: Diosdado M. San Antonio

Development Team of the Module

Writers: Engr. Herminigildo M. Peñera, Jr., Engr. Arvin R. Calimlim, Lovelyn S. Tangpos

Editors: Roel R. Dorado, Romulus N. Tangpos

Reviewers: Martin I. Diaz

Illustrator:

Layout Artist: Mac Andrew M. Solano, Lawrence C. Aduca

Management Team: Allan G. Farnazo, CESO IV

Gilbert B. Barrera

Arturo D. Tingson Jr.

Peter Van C. Ang-Ug

Arlene Rosa G. Arquiza

Ma. Dianne Joy R. dela Fuente

Jesus V. de Gracia

Printed in the Philippines by Department of Education – SOCCSKSARGEN Region

Office Address: Regional Center, Brgy. Carpenter Hill, City of Koronadal

Telefax: (083) 2288825/ (083) 2281893

E-mail Address: region12@deped.gov.ph

7/8

**Technology and
Livelihood Education
Quarter 1 – Module 2:
PERFORMING COMPUTER
OPERATION (PCO)**

Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

Pre-tests are provided to measure your prior knowledge on lessons in each SLM. This will tell you if you need to proceed on completing this module or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teacher are also provided to our facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. And read the instructions carefully before performing each task.

If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.



What I Need to Know

This module was designed and written with you in mind. It is here to help you master the (Performing Computer Operation). The scope of this module permits it to be used in many different learning situations. The language used recognizes the diverse vocabulary level of students. The lessons are arranged to follow the standard sequence of the course. But the order in which you read them can be changed to correspond with the textbook you are now using.

This module consists three lessons:

- LO1 – Plan and prepare for task to be undertaken
(Code TLE_IAEPAS9-12PCO-Ic-d-4)
- LO2 – Input data into the computer
(Code TLE_IAEPAS9-12PCO-Id-e-5)
- LO5 – Maintain computer equipment and system
(Code TLE_IAEPAS9-12PCO-Ig-8)

After going through this module, you are expected to:

1. determine requirements of task in accordance with job specifications;
2. select appropriate hardware and software in accordance with task assigned and required outcome;
3. enter data into the computer using appropriate program/application;
4. check information in accordance with standard operating procedures;
5. store inputted data in storage media according to requirements;
6. undergo systems clearing, minor maintenance, and replacement of consumables;
7. implement procedures for ensuring security of data, including regular backups and virus checks; and
8. discuss basic file maintenance procedure.



What I Know

Directions: Read and choose the letter of your answer. Use the activity sheet for your answer.

1. What is the best way to protect your hard drive data?
 - a. regularly make a backup.
 - b. periodically defrag it.
 - c. run chkdsk at least once a week.
 - d. run scandisk at least once a week.
2. What input device allows you to type the information into the computer?
 - a. mouse
 - b. monitor
 - c. keyboard
 - d. hard disk
3. Which of the following key combination will you use to save files?
 - a. ctrl + S
 - b. ctrl + C
 - c. ctrl + V
 - d. ctrl + P
4. It is a device used primarily to provide hardcopy.
 - a. CRT
 - b. computer console
 - c. printer
 - d. card reader
5. What type of computer devices are the speakers or headphones?
 - a. input
 - b. input/output
 - c. software
 - d. output
6. It is also called the screen or monitor.
 - a. printer
 - b. scanner
 - c. hard disk
 - d. display
7. Which group consists of input devices only?
 - a. mouse, keyboard, monitor
 - b. mouse, keyboard, printer
 - c. mouse, keyboard, plotter
 - d. mouse, keyboard, scanner
8. What type of device is a digital camera?
 - a. input
 - b. output

- c. storage
 - d. software
9. Why is PowerPoint known as presentation application?
- a. It transforms the signal from the computer's sound card into audio.
 - b. It uses slides to convey information rich in multimedia.
 - c. It is used in academic and research fields.
 - d. It is read by bouncing the laser beam off the surface of the medium.
10. What compact disc can be written once and read arbitrarily many times?
- a. CD-R Disc
 - b. flash drive
 - c. hard disk
 - d. monitor
11. How often do we clean up Running Disk?
- a. once a day
 - b. once a week
 - c. once a month
 - d. twice a month
12. What is the procedure in disk clean up?
- A. know w/c drive you want to clean up
 - B. select the appropriate drive to click
 - C. check each of the boxes for clean up
 - D. open disk want to clean up
- a. d,a,b,c
 - b. a,b,c,d
 - c. b,c,d,a
 - d. d,a,b,c
13. Why is it necessary to unplug electrical equipment before cleaning?
- a. to be safe from breakage
 - b. to avoid electric shock
 - c. to prevent current flow
 - d. to be safe from danger
14. If dust contains conductive particles, what will happen?
- a. it can cause power shortage
 - b. it can minimize heat
 - c. it can cause short circuit
 - d. it can give problem
15. What is the first step in cleaning laser printer.
- a. vacuum inside printer
 - b. switch off & unplug printer
 - c. wear disposal plastic gloves
 - d. use lint-free swab

Lesson

1




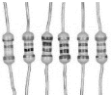

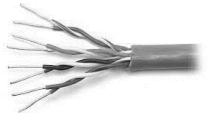
Performing Computer Operations

This lesson was designed and written with you in mind. It is here to help you in Electronic Product Assembly and Servicing acquire the important knowledge and skills in obtaining work instructions in accordance with standard operations and become acquainted with specification of materials and components this will serve as your tool in performing computer operation and its specification needed to complete the work and transfer the skill/knowledge gained into real life situation.



What's In







Activity 1. Directions: Match the pictures in column **A** with their names in column **B**. Write only the letter of your answer in your activity sheet.

Column A	Column B
A. 	A. IDE
B. 	B. RESISTOR
C. 	C. AGP
D. 	D. DVI
E. 	E. UTP
F. 	F. WORK ORDER TEMPLATE



What's New

Activity 2: Direction: Complete the table by writing the name usage of each picture. Write your answer in the activity sheet.

Picture	Name	Usage
		
		
		
		
		
		



What is It

Plan & Organize Work Activities

Determine Specific Tasks

Brainstorm all required tasks throughout the day. Don't worry about organizing at this stage. Think about everything that happens during the day from walking in the door, making the coffee and logging into the computer. If phones need to be turned on from a voice service, include this along with checking messages.

Prioritize and Sequence Tasks

Group tasks together. There may be tasks that need to be done in a specific sequence or together. For example, there may be a series of actions required in opening the office from unlocking the door, disarming the alarm, switching voicemail off, checking messages and making the first pot of coffee.

Set Realistic Timetables

There are some grouped tasks that need to be done at specific times of the day. For example, opening and closing tasks can't be done in the middle of the day. However, other tasks have timetable flexibility. Break the day down into sections to establish a routine.

Remove Potential Distractions

There are so many potential distractions in everyone's workday. Personal cell phones, text messages, instant messages, social media and internet surfing are huge distractions but aren't the only ones.

Basic Computer Hardware

Input Devices

An input device is essentially a piece of hardware that sends data to a computer. Most input devices either interact with or control the computer in some way.

Keyboards are the most common type of input device. Before keyboards, interaction with computers was generally carried out using punch cards and paper tape. Most English language keyboards use the QWERTY layout for the alphabetic keys, which are surrounded by number, symbol, function, and other key types.



Mouse

A mouse interacts with a computer through a process known as "point and click." Essentially, when a user moves the mouse on the mouse pad, the pointer moves in a corresponding direction on the computer's monitor screen.



Touchpad

Also known as a trackpad, a touchpad is a common substitute for a computer mouse. It is essentially a specialized surface that can detect the movement of a user's finger and use that information to direct a pointer and control a computer.



Scanner

The word "scanner" can be used in a number of different ways in the computer world, but here I am using it to refer to a desktop image scanner. Essentially, a scanner is an input



device that uses optical technology to transfer images (or sometimes text) into a computer, where the signal is converted into a digital image.

Digital Camera

Digital cameras are used to capture photographs and videos independently. Later, these photo and video files can be transferred to a computer by connecting the camera directly with a cable, removing the memory card and slotting it into the computer, or through wireless data transfer methods such as Bluetooth.



Output Devices

An output device is a piece of computer hardware that receives data from a computer and then translates that data into another form. That form may be audio, visual, textual, or hard copy such as a printed document.

Monitor

Mode: Visual

Function: A monitor consists of a screen, circuitry, a power supply, buttons to adjust screen settings, and a casing that contains all of these components. A monitor displays data from a computer onto a screen so the user can interact with the data via a digital interface.



Printer

Mode: Print

Function: The function of a printer is to create a copy of whatever is sent from the computer to the printer. Printers take electronic data sent from a computer and generate a hard copy.



Headphones

Mode: Sound

Function: Headphones output audio from a computer through two individual headphones for a single listener. Also known as earphones, headphones allow you to listen to audio without disrupting other people in the vicinity.









Computer Speakers

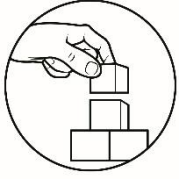
Mode: Sound

Function: Computer speakers are hardware devices that transform the signal from the computer's sound card into audio. Speakers create sound using internal amplifiers that vibrate at different frequencies according to data from the computer. This produces sound.






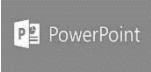




Projector**Mode:** Visual**Function:** As its name suggests, this output device "projects" computer images or video onto a wall or screen.**Computer Application Software (Microsoft Office)**

Computer Application Software	Image/Logo	Definition
Microsoft Word	 Word	Is a word processor published by Microsoft. It is one of the office productivity applications included in the Microsoft Office suite.
Microsoft Excel	 Excel	Is a software program produced by Microsoft that allows users to organize, format and calculate data with formulas using a spreadsheet system.
Microsoft Access	 Access	is a database management solution for Windows operating systems
Microsoft PowerPoint	 PowerPoint	The program uses slides to convey information rich in multimedia. The term "slide" refers to the slide projector, which this software effectively replaces.
Microsoft outlook	 Outlook	An email client that includes such functions as calendaring, task managing, contact managing, note-taking, journal logging, and web browsing.
Microsoft publisher	 Publisher	is a graphic design application that is similar to Microsoft Word but differs in the fact that its emphasis lies more on page layout and design, and less on word composition and formatting.



What's More

Activity 3: Using the activity sheet, complete the table below by writing the name of the logo/picture and its function and application.

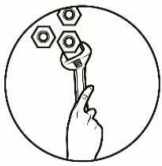
Hardware and Software	Name	Application or function
		
		
		
		
		
		
		
		



What I Have Learned

Activity No. 4: Direction: Fill-in the blanks. Use the activity sheet for your answer.

- 1.) A _____ is a piece of computer hardware that receives data from a computer and then translates that data into another form. That form may be audio, visual, textual, or hard copy such as a printed document.
- 2.) A _____ is essentially a piece of hardware that sends data to a computer. Most input devices either interact with or control the computer in some way.
- 3.) Storage devices are the computer hardware used to _____.
- 4.) A _____ is an input device that uses optical technology to transfer images (or sometimes text) into a computer, where the signal is converted into a digital image. The digital image can then be viewed on a monitor screen, saved, edited, emailed, or printed.
- 5.) _____ is a software program produced by Microsoft that allows users to organize, format and calculate data with formulas using a spreadsheet system.



What I Can Do

Activity No. 5:

Directions: Answer the following questions using the activity sheet.

As a 21st century learners, you are assigned to report about the parts of the human body, what Microsoft Office application will you use to make your report more realistic? Why

Lesson

2











Input Data into The Computer



What's In

Activity 6:

Direction: Using the activity sheet, complete the table below by writing the name of the logo/picture and its function and application.

Hardware and Software	Name	Application or function
		
		
		
		
		
		
		
		
		
		



What's New

Activity 7:

Direction: Make a collage that can relate your daily activities in school and at work by drawing or cutting pictures. Use the activity sheet for your answer.

Guided Questions in your collage making:

1. How technology/computer eased your daily activities?
2. How technology/computer use in global education?



What is It


Application Software

A computer application is any program, or group of programs, that is designed for the end user. Include such things as database programs, word processors, Web browsers and spreadsheets. Commonly use as application software is Microsoft Office.

Saving Data

You can save a file to a folder on your hard disk drive, a network location, the cloud, a DVD, the desktop, or a flash drive. While you must identify the destination, if it is different than the default folder, the saving process is the same regardless of what destination you choose.

To save your file:

1. Press CTRL+S or select **File > Save**.
Tip: You can also select **Save**  on the **Quick Access Toolbar**.
2. You must enter a name for the file if you are saving it for the first time.

Storage Devices

Storage devices are the computer hardware used to remember/store data.

There are three main categories of storage devices

Optical storage devices save data as patterns of dots that can be read using light. A laser beam is the usual light source.



Magnetic storage and retrieval devices include tape, flexible disk, and rigid disk drives used for audio, video, and data processing applications.



Semiconductor storage device - a temporary data storage domain

Two types of semiconductor memory:

Random-Access

Memory (RAM)

Read-Only Memory

(ROM).



Other Storage Devices

Hard Disk Drive

Hard disk drives are non-volatile magnetic storage devices capable of remembering vast amounts of data.

Flash Drive are non-volatile solid-state storage devices which use NAND flash memories to store data (millions of transistors)



CD-R (COMPACT DISC – Recordable) is a digital optical disc storage format. A CD-R disc is a compact disc that can be written once and read arbitrarily many times.



CD-RW (which stands for Compact Disc ReWritable) is a Compact disc that can be recorded and erased multiple times. It can hold data or music. Most of the time it will hold data, since many CD players cannot play CD-RWs. During its development, the format was known as CD-E, which stands for Compact Disc Erasable



Digital Versatile Disc. A DVD is a type of optical media used for storing digital data. It is the same size as a CD, but has a larger storage capacity.



What I Have Learned

Activity 8

Direction: Fill in the blanks. Write your answer in the activity sheet.

- 1.) A _____ is any program, or group of programs, that is designed for the end user. Include such things as database programs, word processors, Web browsers and spreadsheets.
- 2.) A _____ is a special type of data processing that is used in academic and research fields.
- 3.) A _____ has multiple uses, and may not necessarily require complex sorting. It was first used widely in the field of marketing, for customer relationship management applications, and in banking, billing, and payroll functions.
- 4.) A _____ are non-volatile magnetic storage devices capable of remembering vast amounts of data.

5.) A _____ is a type of optical media used for storing digital data. It is the same size as a CD, but has a larger storage capacity.



What I Can Do

Activity 9

Direction: Answer the questions using the activity sheet.

1. State the procedure in opening and editing a file in Microsoft PowerPoint.
2. Specify the steps in inserting images, graphics, or shapes in Microsoft word.

Lesson 3	<h1>Maintain Computer Equipment and Systems</h1>
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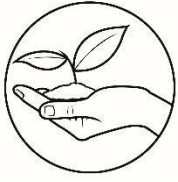


What's In

Activity 10

Direction: Draw a picture from the item written in the description. Use the activity sheet for your answer.

Illustration	Description
	A mouse interacts with a computer through a process known as "point and click."
	A monitor consists of a screen, circuitry, a power supply, buttons to adjust screen settings, and a casing that contains all of these components.
	Computer speakers are hardware devices that transform the signal from the computer's sound card into audio.
	Flash Drive are non-volatile solid state storage devices which use NAND flash memories to store data (millions of transistors)
	The function of a printer is to create a copy of whatever is sent from the computer to the printer.



What's New

Activity 11

Direction: Illustrate by means of drawing/picture cutting, how to repair computer? Use your activity sheet.

Guided Questions in your illustration.

1. What is computer hardware/software servicing?
2. What are the basic elements of computer servicing?



What is It

Computer Maintenance

Disk cleanup in Windows

Disk Cleanup is a Microsoft software utility first introduced with Windows 98 and included in all subsequent releases of Windows. It allows users to remove files that are no longer needed or that can be safely deleted.

How to open Microsoft Disk Cleanup?

To delete temporary files:

- In the search box on the taskbar, type **disk cleanup**, and select **Disk Cleanup** from the list of results.
- Select the drive you want to clean up, and then select **OK**.
- Under **Files to delete**, select the file types to get rid of. To get a description of the file type, select it.
- Select **OK**.

If you need to free up more space, you can also delete system files:

- In Disk Cleanup, select **Clean up system files**.
- Select the file types to get rid of. To get a description of the file type, select it.
- Select **OK**.

Checking Disk Error

The **Check Disk** utility, also known as **chkdsk** (since that's the command you use to run it) scans through your entire **hard drive** to find and **fix** problems. Chkdsk attempts to **fix** these problems by repairing soft bad sectors, and

marking hard bad sectors so they won't be used again

Maintain equipment and consumables

Maintenance in an IT environment

Some items requiring maintenance in an IT environment would be:

- Printers- Printouts may be streaky or faded. The printer may need either cleaning or new cartridge.
- Monitors- Fingerprints may make the text difficult to read.
- PC's- A PC may not boot correctly. In investigation required and possible re- installation of the operating system.
- Peripherals- A scanner or bar code reader may not be functioning properly.
- Floppy disk Drive- The system may not read floppy disks. The drive may need cleaning.
- Replacing paper- Printers, photocopiers and fax machines may run out of paper.

Precautions are guidelines to be followed to prevent damage to equipment or injury to people. The following are *very important* precautions:

- Before cleaning any electrical equipment make sure that it is *switched off* and *unplugged* from the mains.
- Allow certain equipment, such as monitors and laser printers, to cool down and lose their capacitance (charge) before cleaning them for at least 30minutes.
- When cleaning inside the PC, or handling parts from a PC such as hard disk or circuit boards, you should earth yourself using *antistatic wrist strap*.
- Always refer to the manufactures manual before attempting to clean any equipment, because improper cleaning or maintenance may be dangerous and also may invalidate your warranty.
- Some equipment such as power supplies and monitors use voltages and therefore should only be maintained by specially trained people.

Cleaning in an IT environment.

Why clean?

Dust needs to be removed because it acts as an *insulator* that prevents air from circulating over or through the components and this can cause overheating. If dust contains conductive particles it can also cause a *short circuit*, which damage components or even cause a fire.

Removing Dust

Dust can be removed using a household vacuum cleaner with an appropriate attachment, although it is much easier to use a purpose-built computer vacuum cleaner or keyboard cleaner.

Residue from hands

The human skin produces residues that cling to surface of the computer hardware we touch, which can be removed with liquid cleaners. However, use

only specifically designed cleaners for cleaning computer equipment.

Unsuitable cleaners may:

Cleaning kits

The contents of kits vary, but generally kits include:

Item	How is it used?
Small brush	Or dusting components of electrical equipment
Antistatic grounding strap	To earth yourself while cleaning inside a PC
Lint-free foam cleaning swabs or buds (looks like cotton buds)	Are used with isopropyl alcohol, which is dabbed on the bud and then used to clean such components as the edge connectors on cards, the contacts inside mice, and keyboards.
Cleaning wipes	Are small lint-free cloths for cleaning the system unit casing, monitor and keyboard
Contact cleaning solution	Not only helps clean the edge connectors and electrical contacts inside the PC but also helps to promote reliable connections.
Compressed air	Is used for blasting dust out of obscure corners which might not be able to reach with a mini vacuum cleaner.
Cleaning disks for 3.5 and 5 1/4 disk drives	Consists of an outer shell and replaceable inner material on to which you put a few drops of special cleaning fluid.
CD-Cleaning kit	Cleans dust and grease from the CD. Also keep the CDs in their cases, handle them by edges and periodically clean them using the cleaning kit.
Cleaning sheets for laser printers, plain-paper fax machines and photocopiers	Are fed through the device in the normal way for paper, but they remove toner, dirt and dust from the paper path, which improves the print quality.

Cleaning Peripherals Monitors

Carefully clean dust away from the vents in the monitor's enclosure using a vacuum cleaner. If you use a spray to clean a monitor you should be careful to spray the wipe.

Printers

You will get the greatest benefit from cleaning a printer if you can remove any dust from the paths of moving parts. To do this you may need to remove covers or paper trays.

Laser Printers

To clean laser printers:

- Switch off and unplug the printer, and wait at least 30 minutes for it to cool.
- Wear disposable plastics gloves.
- Clean the outer casing of the printer using a dampened paper towel or a lint-free cloth with a little detergent on it.
- Check for, and remove any loose bits of paper.
- Vacuum inside the printer using a static-safe vacuum cleaner.
- Use a lint-free swab dipped in isopropyl alcohol to clean the corona wire.

Keyboards

The keyboard tends to not only accumulate a lot of dust and skin residue but also some hair and lint from clothing. Loose matter can generally be removed with the vacuum cleaner.

Mouse

The mouse tends to accumulate a mixture of dust and skin residue from the surface it rolls on.

Scanners and photocopiers

Use a lint-free cloth dabbed with whatever chemical the manufacture recommends to wipe it clean.

Power Supplies

Maintenance for the power supply to PCs includes:

- Vacuuming dust from the vent holes
- Checking that the cables coming out of them are not worn or broken
- Checking that the power socket is clear of dust and dirt

Tape Drives

Because tape drives are usually used for backing up data, it is important that they are kept clean, so that data is not corrupted by oils and other contaminants during the backup process. You can purchase cleaning tapes, or you can usually use a lint-free bud.

File Maintenance

Four Types of Maintenance Strategy

1. Corrective maintenance. Maintenance is carried out following detection of an anomaly and aimed at restoring normal operating conditions.
2. Preventive maintenance. Maintenance carried out at predetermined intervals or according to prescribed criteria, aimed at reducing the failure risk or performance degradation of the equipment.
3. Risk-based maintenance. Maintenance carried out by integrating analysis, measurement and periodic test activities to standard preventive maintenance.
4. Condition-based maintenance. Maintenance based on the equipment performance monitoring and the control of the corrective actions taken as a result.

Backing up Files

Six ways to back up your data.

1. **USB stick.** Small, cheap and convenient, USB sticks are everywhere, and their portability means that they're easy to store safely, but also pretty easy to lose.
2. **External hard drive** External hard drives are just what they sound like – hard drives that live outside your computer, meaning they can be plugged in to other sources. If using them for backup, it's best not to use them as an 'extra every day hard drive'.

3. **Time Machine-** For the Mac users out there, Time Machine is an option that backs up to external hard drives automatically. Apple sells its own brand of dedicated wireless Time Capsules, but you can use any hard disk for it.
4. **Network Attached Storage** Businesses tend to back-up their files to network attached storage, but with more and more homes having multiple computers, the idea has a certain appeal, especially for those looking to save files from more than one source.
5. **Cloud Storage** While network attached storage is essentially your own Cloud Server, there are plenty of third party cloud storage options around: free, paid, or free with paid extras. iCloud, Dropbox, Google Drive and OneDrive are big names, but others are available.
6. **Printing** At a first glance, this might sound a facetious inclusion. But while considerably less technically advanced, printing offers you a hard copy of your most important documents that will survive power outages, and are easy to store and access even if your computer is out of action for a few days.

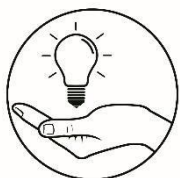
Deleting unwanted files

How to delete unnecessary files using Disk Cleanup

Disk Cleanup helps free up space on your hard drive. Disk Cleanup searches your drive, and then shows you temporary files, Internet cache files, and unnecessary program files that you can safely delete. You can direct Disk Cleanup to delete some or all of those files.

Updating anti-virus

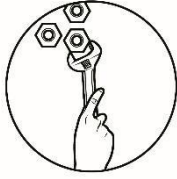
Keeping your computer safe from viruses is extremely important, especially if your computer connects to the Internet. Antivirus software can help you keep your computer safe, but only if you keep its up-to-date. Use the steps on this page to make sure the antivirus program has the newest information about viruses that might infect your computer.



What I Have Learned

Activity 12: Direction: Answer the following questions correctly and write them in your activity sheet.

1. A _____ maintenance is carried out following detection of an anomaly and aimed at restoring normal operating conditions.
2. A _____ maintenance carried out at predetermined intervals or according to prescribed criteria, aimed at reducing the failure risk or performance degradation of the equipment.
3. A _____ maintenance carried out by integrating analysis, measurement and periodic test activities to standard preventive maintenance.
4. A _____ maintenance based on the equipment performance monitoring and the control of the corrective actions taken as a result.
5. A _____ software can help you keep your computer safe, but only if you keep its up-to-date.



What I Can Do

Activity 13: Direction: Answer the questions using the activity sheet.

1. Why do you need to have a preventive maintenance in an IT environment?
2. State the guidelines in maintaining equipment and consumables in IT to be followed to prevent damage to equipment or injury to people.



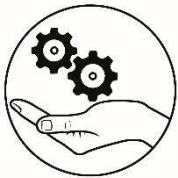
Assessment

Direction: Read each question carefully. Write your chosen letter on your activity sheet.

1. How often do we clean up Running Disk?
 - a. once a day
 - b. once a week
 - c. once a month
 - d. twice a month
2. What is the procedure in disk clean up?
 - A. know w/c drive you want to clean up
 - B. select the appropriate drive to click
 - C. check each of the boxes for clean up
 - D. open disk want to clean up
 - a. D,A,B,C
 - b. A,B,C,D
 - c. B,C,D,A
 - d. D,A,B,C
3. Why is it necessary to unplug electrical equipment before cleaning?
 - a. to be safe from breakage
 - b. to avoid electric shock
 - c. to prevent current flow
 - d. to be safe from danger
4. what will happen, If dust contains conductive particles?
 - a. it can cause power shortage
 - b. it can minimize heat
 - c. it can cause short circuit
 - d. it can give problem

5. What is the first step in cleaning laser printer.
 - a. vacuum inside printer
 - b. switch off & unplug printer
 - c. wear disposal plastic gloves
 - d. use lint-free swab
6. It is also called the screen or monitor.
 - a. printer
 - b. scanner
 - c. hard disk
 - d. display
7. Which group consists of input devices only?
 - a. mouse, keyboard, monitor
 - b. mouse, keyboard, printer
 - c. mouse, keyboard, plotter
 - d. mouse, keyboard, scanner
8. What type of device is a digital camera?
 - a. input
 - b. output
 - c. storage
 - d. software
9. Why is PowerPoint known as presentation application?
 - a. It transforms the signal from the computer's sound card into audio.
 - b. It uses slides to convey information rich in multimedia.
 - c. It is used in academic and research fields.
 - d. It is read by bouncing the laser beam off the surface of the medium.
10. What compact disc can be written once and read arbitrarily many times?
 - a. CD-R Disc
 - b. flash drive
 - c. hard disk
 - d. monitor
11. What is the best way to protect your hard drive data?
 - a. regularly make a backup.
 - b. periodically defrag it.
 - c. run chkdsk at least once a week.
 - d. run scandisk at least once a week.
12. What input device allows you to type the information into the computer?
 - a. mouse
 - b. monitor
 - c. keyboard
 - d. hard disk

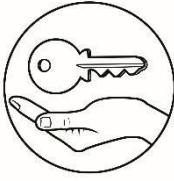
13. Which of the following key combination will you use to save files?
- ctrl + S
 - ctrl + C
 - ctrl + V
 - ctrl + P
14. It is a device used primarily to provide hardcopy.
- CRT
 - computer console
 - printer
 - card reader
15. What type of computer devices are the speakers or headphones?
- input
 - input/output
 - software
 - output



Additional Activities

Answer the following questions.

- 1.) What is the importance of a resistor in a circuit?
- 2.) State the characteristics of a resistor.
- 3.) Draw the electronic symbol of a different types of resistor.



Answer Key

LESSON 1

<p>Assessment</p> <p>1. D 2. C 3. B 4. C 5. D 6. D 7. D 8. A 9. B 10. A 11. A 12. C 13. A 14. C 15. D</p>	<p>What's More</p> <p>1. Microsoft Word - Is a word processing application. 2. Microsoft Excel - use to organize, format and calculate data with formulas using spreadsheets. 3. Printer - take electronic data send from a computer and generate a hard copy. 4. Microsoft PowerPoint - A powerful presentation software. The program uses slide to convey information rich in multimedia. 5. Monitor - Display data from a computer onto a screen so the users can interact with the data via a digital interface. 6. Microsoft Outlook - Uses as calendaring, task managing, contact managing, note taking, journal logging and web browsing. 7. Projector - An output device projects computer images or video onto a wall or screen.</p>	<p>What I Know</p> <p>1. A 2. C 3. A 4. C 5. D 6. D 7. D 8. A 9. B 10. A 11. B 12. A 13. C 14. B 15. A</p>	<p>What Can I Do</p> <p>Microsoft Power Point - The program uses slides to convey information rich in multimedia. The term "slide" refers to the slide projector, which this software effectively replaces.</p> <p>What I Have Learned</p> <p>1.) Output Device 2.) Input Data 3.) Stored Data 4.) Scanner 5.) Microsoft Excel</p>
<p>What's New</p> <p>1.) System Unit- electronic Device that can manipulate data processing. 2.) Monitor - Displays data from a computer onto a screen so that users can interact with the data via a digital interface. 3.) Mouse - interact with a computer through a process known as point and click. 4.) keyboard - are common type of input device. 5.) CD ROM Drive - is a pre-pressed optical compact disc that contains data. 6.) CD - Optical Disk is an storage devices.</p>	<p>What's In</p> <p>A) C B) D C) A D) B E) F E) E</p>		

LESSON 2

What's In






1. Microsoft Word – Is a word processing application.
2. Microsoft Excel – use to organize, format and calculate data with formulas using spreadsheets.
3. Printer – take electronic data send from a computer and generate a hard copy.
4. Microsoft Powerpoint – A powerful presentation software. The program uses slide to convey information rich in multimedia.
5. Monitor – Display data from a computer onto a screen so the users can interact with the data via a digital interface.
6. Microsoft Outlook – Uses as calendaring, task managing, contact managing, note taking, journal logging and web browsing.
7. Projector – An output device projects computer images or video onto a wall or screen.

What I Have Learned

- 1.) Application Software
- 2.) Scientific Data
- 3.) Microsoft Power Point
- 4.) Hard Disk Drive
- 5.) Optical Disk

LESSON 3

What's In

- 1.) 
- 2.) 
- 3.) 
- 4.) 
- 5.) 

What Can I Do

- 1.) Preventive Maintenance – Maintenance carried out at predetermined intervals or according to prescribed criteria, aimed at reducing that failure risk or performance degradation of the equipment.
- 2.) Follow properly the procedure of cleaning of IT peripherals.

What I Have Learned

- 1.) Corrective Maintenance
- 2.) Preventive Maintenance
- 3.) Risk Based Maintenance
- 4.) Conditional Based Maintenance
- 5.) Updating Anti Virus

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For inquiries or feedback, please write or call:

Department of Education - Bureau of Learning Resources (DepEd-BLR)

Ground Floor, Bonifacio Bldg., DepEd Complex
Meralco Avenue, Pasig City, Philippines 1600

Telefax: (632) 8634-1072; 8634-1054; 8631-4985

Email Address: blr.lrqad@deped.gov.ph * blr.lrpd@deped.gov.ph