TOPIC 2. COMPUTER MANAGEMENT.

1. (a) Describe the term "Booting"? As used in Computer Management.

This is the process of starting or resetting of a computer which involves loading of the operating system into memory

(b) Give the difference between cold and warm booting.

Cold booting/hard booting . This is the process of turning on a computer after it had been powered off completely. While

Warm booting/Soft booting: This is the process of restarting a computer that already is powered on.

(c). Briefly, explain two reasons for restarting a computer.

- When the computer stops responding
- After installing a software program
- After uninstalling a software program
- To recover from errors that cannot be recovered.
- When a computer freezes or locks
- When the computer slows down.

(d)Briefly explain process of cold booting

- The power supply sends a signal to the components in the system unit. The processor finds the ROM chip(s) that contain the BIOS (Basic input/output system).
- The BIOS performs the POST (Power-On Self-Test) which checks components such as the mouse, keyboard and adapter cards. A series of messages may display.
- The results of the POST are compared with the data in the CMOS chip
- The BIOS looks for the boot program that loads the operating system
- Once located, the boot program is loaded into memory and executed.
- It then loads the kernel of the operating into memory
- The system files and the remainder of the Operating System load into RAM from the Hard Disk.
- The OS loads configuration information and displays the welcome screen

(d) Differentiate between a bug and debugger?

2. (a) What is meant by the term File Management

This refers to how files are managed in the computer.

(b) Define the following terms as used in File Management.

- A file is a collection of logically related records. Or It is an object on a computer that stores data, information, settings, or commands used with a computer program.
- **Folder-**This is a virtual container in a computer's file system in which groups of files and other folders are kept and organized. Or It's a virtual storage area of a file, a program etc on a computer
- File name .This is a name by which a file is identified .e.g forictseminar.doc. Ictseminar is the file name. file names have some invalid characters e.g. /\:? "<
- *Icons:* These are small graphic images or pictures that represent a file, program, web page, or a command.
- **Desktop:** This is the first computer screen display before any program is opened.
- Fileextension. It's a group of letters that occur after a period after the file name indicating the format of the file

(c)Describe how you would copy a file from one location to another in the computer.

- *Select the file*
- Right click on it
- Choose and click on copy
- Click in the new location e.g. desktop.
- Right click
- Choose and click paste

(d) Briefly describe how you the procedures you would follow to create a new folder

- Right click where you want the new folder e.g. desktop, in a folder.
- Select new and click on folder.
- Enter the name of the folder.
- *Press enter or click anywhere*

(e) Explain briefly the procedures one would follow to delete unwanted folder in the computer.

- *Select the folder to delete.*
- Right click on it
- click delete.

OR

- *Click on the folder*
- Press delete on the keyboard.

(f). Explain five types of files that you know in the computer.

- *Master files*These consist of records that are relatively permanent. i.e. they remain in the system indefinitely. E.g. employee files, inventory files.
- *Transaction files*Files which contain records that describe business.

- **Scratch files/temporary files**. These contain temporary duplicates of master tasks. They are single task files.
- Table files. Used to store tabular data.
- Backup files: Are duplicate copies of files.
- Image files .These are files with digitized graphics
- Audio files. These are files with digitized sound data.
- Video files. These are files with digitized video images for conveying moving clips, images

(g) List any five examples that you know

(i) Audio files

- .aif audio interchange format
- .mid/midi
- .cda CD audio track file
- .mp3
- .mpa
- .wma wave form
- .oggOggvorbis audio file

(ii) Executable file extensions

- .apk android package
- .bat batch file
- .bin binary file
- .com MS.DOS command
- .exe executable file
- .py python file
- .jar java archive file
- .wsf windows script file

(iii) Image file extensions

- .bmp bitmap image
- .ico icon file
- .gif graphical interchange format
- .png portable network graphics
- .jpeg/.jpg joint picture expert group
- .bmp basic metabolic panel

(iv) Video file extensions

- .rm real media file
- .wmv windows media video file
- .swf shockwave flash file
- .mov movie file
- .mpg/.mpeg moving picture expert group
- .3qp

(v) Document file extensions

- .doc/.docx Microsoft word
- .pdf portable document file
- .txt plain text file
- .wpd word perfect document
- .rtf rich text format

(vi) Other file extensions include

- .xls/xlsx Microsoft excel
- .sys system file
- .tmp temporary file
- .bak backup files
- .ini initialization file
- .ppt/.pptxpowerpoint presentation

(h) Give two importance of file extensions.

- *Helps to identify the file type*
- To identify the software type used to prepare the document

(i) Define the term file path/file storage location

This is a path that indicates the location of a file from its root directory.

(k) Study the file path given below and answer questions following:

C:users\admin\desktop\ict dept\sub ict\ict seminar.ppt

- C:is the drive/root directory
- Adminis the account name
- *Desktop* is the place where to find the file.
- *Ictdept*is the sub folder 1
- **Sub ict**is the sub folder 2
- *Ict seminar* is the file name.
- .ppt is the file extension.

(l) .Study the file path given below and answer questions following:

C:\KCB-01\PCM\Desktop\Senior Six\EOTP1.docx

Identify the following parts:

- (a). Root directory: C:\
- (b). Computer Name: KCB-01
- (c). File extension..docx
- (d). Folder location. Desktop
- (e). Account Name. PCM

Explain the meaning of the following system folders as used in file management

- Document and settings: This contains a sub folder for each user profile.
- **Program files**: This is where most programs install the files they need in order to run.
- **Temp.** This is where temporary files of the operating system and other files are kept.
- My documents. This is a convenient place to store documents It contains two other subfolders . My pictures: Subfolder for keeping pictures My music: subfolder for keeping music files

Describe the steps you would follow to print an open document.

- Go to the windows button/file
- Click on print OR press CTRL + P on the keyboard.
- Select the printer installed onto the computer.
- Select number of pages/pages to print.

Explain the meaning of the following models of printing

- *Multiple page printing*: This is when the user prints more than one page of the same document on a single sheet of paper
- Multiple copies printing: This is where the user prints more than one copy of the same document.
- Handout printing: This is where multiple slides are printed on one page
- Slide printing: This is the mode of printing where a single slide is printed and covers the whole page

Describe what is meant by common utilities/utilities/utility software?

This is the system software designed to analyze, configure, optimize, and maintain a computer is its best working state.

Explain any four examples of common utilities/utility software

- Antivirus utility: used to search, find and remove viruses from the computer
- System archivers: These output a stream or a single file when provided with a directory/set of files.

- Backup utility: makes a copy of all information stored on the hard disk onto another storage medium e.g external hard disk, dvds, etc.
- Cryptographic utilities: used to encrypt and decrypt streams of files.
- Data compression utilities: output a smaller file when provided with a file.
- Disk checkers: these scan an operating hard drive for logical (file system) and physical errors
- disk cleaners: these find files that are unnecessary to computer operation, or take up considerable amount of space. They help to decide what to delete when the hard disk is full.
- **Disk compressors**: these compress/uncompress the content of a disk thus increasing the capacity of the disk.
- disk defragmenters: These detect computer files whose content is scattered in several locations on the hard disk and move fragments to one location to increase efficiency.
- **Screen savers**: these prevent phosphor burn-in on CRT and plasma monitors by filling it with moving images, patterns when the computer is not in use.
- Sorting utilities: these help to organize data in a given order.
- Memory testers: these check for memory failures.
- **Disk partition editors**: these divide a drive into multiple logical drives, each with its own file system which can be mounted by the operating system to be treated as an individual drive.
- *File synchronization utilities*: these maintain consistency between two sources. They enable redundancy or making copies of data.
- **System profilers**: provide detailed information about the software installed and hardware attached to the computer.
- Network utilities: these analyze a computer's network connectivity, configure network settings, check data transfer or log events

Differentiate between copy a file and move a file.

Copy a file creates a duplicate of a file or text while **move a file** change the position of a file from one directory to another.

Give the difference between a file and a folder.

A file is a collected of data that is related, while; a folder is directory where many files can be stored.

State two advantages of keeping files in a folder.

- It is easy to locate certain files.
- It makes the desktop area not congested with many files.
- *It allows one to compress files.*
- It allows one to move an entire block of files in one location i.e. Folders.
- It helps users to protect files by applying folder locks.

Mention one way you can recover a file lost from your computer.

- *Backing up data.*
- *Use of data recovery utility programs.*
- pressing undo.

In the process of booting, writedown a function for each of the following: (i). CMOS.

CMOS(Complementary metal-oxideSemiconductor) is used to store configuration information about the computer, which includes amount of memory, types of disk drives, keyboard, monitor, current date and time, etc.

(ii). RAM: Providesstorage of the kernelthatisloaded into RAM to enable the computer to boot.

Mentiontwowaysafile iskeptsecureina computer.

- o By passwordingfiles.
- o By installingalatestcopyofanantivirusprogram.
- o By encryptingfiles.
- o By limitingphysicaluseof computerfacility to users.
- o By backingup filesregularly.
- o By avoiding the usage of oldstorage devices.
- o By sensitizingusersaboutthe needtokeepfilessecure.
- o By punishing offenders that change files.
- o By applyingkeepingalogofusersto monitortheiractivities.

Mention any two back - end booting processes.

- o Power on Self-test
- o RAM loads the operating system.

Give one basic use of a CMOS chip during booting.

The CMOS chip keeps BIOS settings during booting.

What is the importance of RAM in the booting process.

RAM provides the primary storage location where the main program in the operating system in stored for execution.

Define the following terms as used in relation to the Windows environment.

- (i). Log off. log off or log out is a term used to describe the process of disconnecting from a network, user account or what occurs when your connection is lost.
- (ii). **Hibernation** is the process of powering down a **computer** while retaining its state.

Give one reason why a computer may fail to start.

- It could be having hardware problems.
- It could be having a software problem.

In relation to a computer's keyboard, mention one practical use of the following keys:

(a). Backspace.

A key that erases a character to the left of the cursor.

(b). Num lock.

When activated, enables the user to enter numbers off the numerical pad by default.

(c). Functional keys.

A function key is a key on a computer or terminal keyboard which can be programmed so as to cause an operating system command interpreter or application program to perform certain actions.

(d). CapsLock.

When activated, text characters can be typeset in capital letters by default.

(e). Space bar.

- Enables the user to insert gaps in text being type set.
- *Scroll through a webpage.*
- To align text in office 2003.
- Pause music.
- Play computer music.