**COMPUTER STUDIES JSS 1**

**THIRD TERM**

## **SCHEME OF WORK**

**WEEK TOPIC**

1. REVISION/DEFINITION OF COMPUTER PROCESSING
2. IMPORTANCE OF COMPUTER AS A DATA PROCESSING TOOL.
3. THE DEVICE
4. TYPES OF COMPUTER
5. USES AND APPLICATION OF COMPUTER
6. ADVANTAGES AND DISADVANTAGES OF COMPUTER
7. MASTERY OF THE KEYBOARD I
8. MASTERY OF THE KEYBOARD II
9. SCREEN POINTING DEVICES
10. FUNDAMENTAL COMPUTER OPERATION

**WEEK ONE**

**TOPIC: DEFINITION OF COMPUTER PROCESSING**

**COMPUTER PROCESSING**

Computer processing is an action or series of actions that a microprocessor, also known as a [central processing unit](http://www.wisegeek.com/what-is-a-central-processing-unit.htm) ([CPU](http://www.wisegeek.com/how-does-a-cpu-work.htm)), in a computer performs when it receives information. The CPU is a type of electronic “brain” for a computer system, and it executes a series of instructions that are fed to it by software programs installed onto a computer’s [hard drive](http://www.wisegeek.com/what-is-a-hard-drive.htm) and loaded into random access memory (RAM). Though modern computer systems have become much faster and more complex than their earlier counterparts, they still perform the same basic type of computer processing.

There are four distinct states that processing goes through in order to produce meaningful output for any program. These states are commonly referred to as **(fetch, decode, execute and write back).**

A computer has four main components: the central processing unit or CPU, the primary memory, input units and output units. A system bus connects all the four components, passing and relaying information among them.

* **Central Processing Unit (CPU)**

Computer scientists typically call the CPU the "brain" of the computer because this is where programs are executed. The CPU is further broken up into three smaller components: the arithmetic unit handles all the simple mathematical computations; the control units interpret the instructions in a computer program; and the instruction decoding unit converts computer programming instructions into machine code.

* **Memory**

Once the CPU converts a specific set of computer program instructions into machine code, it stores that machine code in primary storage or memory. The machine code will be treated as either data or instructions. The CPU fetches data and instructions from memory, uses an instruction to manipulate the data, and then sends the result and the next set of instructions back to memory.

* **Input Units**

Input units are all the devices you use to feed data to the computer, such as a keyboard, a hard drive or a networking card. These devices, in essence, bring data from the "outside world" into your computer, in much the same way that your eyes and ears bring information to your brain. Each input device has its own hardware controller that connects to the CPU and primary memory, and it has a set of instructions that tells the CPU how to use it.

* **Output Units**

Output units are the devices your computer uses to relay information to the user, such as a printer, monitors and speakers. For example, everything you see on your computer monitor starts as machine code in memory. The CPU takes that machine code and converts it into a format required by your monitor's hardware. Your monitor's hardware then converts that information into different light intensities so that you see words or pictures.

**EVALUATION**

1. Define computer processing.
2. State four main components of computer.

**Uses of Computer in communication**

1. Computer gadgets such as mobile phones, palmtops can be used in communicating
2. The use of Video and Tele-conferencing in having meeting(s) with various members of staff or board of directors in different locations, with the ability to view themselves.
3. Used in sending and receiving mails through the internet.
4. Used in multi- media communications.

**Uses of Computer in Timing and Control**

1. Traffic Control
2. Weather Control
3. Machine Control
4. Airplane Control

**Uses of computer in information Processing and Management**

* **Marketing:** individuals and companies also use the system to source for e-shopping, 0n-line payment and delivery of ordered goods.
* **Generation of payroll:** Computers can be used to prepare and process payroll through Microsoft Excel.
* **Accounting and Banking:** Computers are used to keep proper and effective records of both goods and customer’s money.

**Uses of computer in the society**

* **Health Care:** Hospitals are comprehensively computerized in order to facilitate patient care at competitive cost.
* **Airlines:** Airline reservation agent communicates with a centralized computer via a remote terminal to update the database the moment a seat on any flight is filled or becomes available.
* **Law:** Lawyers use keywords to search through massive full text database containing more cases than in any law office’s library.

**GENERAL EVALUATION**

1. Define computer processing.
2. State four main components of computer.
3. State five uses of computer in the society.

**WEEKEND ASSIGNMENT**

1. The ……..... executes a series of instructions that are fed to it by software programs installed onto a computer’s [hard drive](http://www.wisegeek.com/what-is-a-hard-drive.htm) and loaded into random access memory (RAM). (a) core (b) CPU (c) ROM (d) control unit
2. ……….. stores program instruction in the computer system. (a) memory (b) CPU (c) ALU (d) control unit.
3. ……….. are the devices your computer uses to relay information to the user. (a) input unit (b) output unit (c) memory (d) primary.
4. ………. are all the devices you use to feed information to the computer. (a) input unit (b) output (c) memory (d) CPU
5. ……….. are comprehensively computerized in order to facilitate patient care at competitive cost. (a) Hospitals (b) airline reservation (c) banking (d) payroll

**THEORY**

1. Define computer processing.
2. State four main components of computer.
3. Mention four areas of the society where computer is used.
4. List four areas where computer is used in timing and control.

**WEEK TWO**

**TOPIC:** **IMPORTANCE OF COMPUTER AS A TOOL FOR PROCESSING DATA**

**DATA PROCESSING TECHNIQUES**

There are different basic techniques of data processing namely:

Batch Processing

Real Time Processing

Time Sharing Processing

Demand Processing

Multi Processing

**BATCH PROCESSING**

It is a technique by which a number of jobs (data) are inputed into the computer system at the same time and the computer is made to execute those jobs, one after the other in sequence, at its own pace. This type of processing is suitable for accounting and business applications such as payroll accounts, invoicing, purchases, sales, ledger etc.

**REAL TIME PROCESSING**

In Real-Time Processing data are processed immediately, now. It is processed in rapid manner so that the results of the processing are available in time to influence the current activity or process being monitored or controlled. It is useful in transaction application where time is a critical factor e.g. airline reservations, banks etc.

**TIME SHARING**

In time-sharing processing, many users can work with the computer through terminals that are connected to remote distance. Here, the processor time is shared among variable number of users at essentially the same time, that is, it allows simultaneity and concurrency. Each user is given a fraction of the processor time, at the elapse of which the processor is switched over to another user.

**DEMAND PROCESSING**

This is a type of processing that is done only when it becomes necessary. The data have been stored in the computer memory, and would then be processed when it becomes necessary.

**MULTI PROCESSING**

In all the modes of computer operation discussed earlier only one processor is in the system. A multi processing system is one in which there are two or more processors that may be sharing the same main memory. This makes simultaneous execution of two or more programs possible.

**ONLINE PROCESSING**

This is a kind of processing whereby many terminals are directly connected to the CPU. It also involves a method of entering transaction and getting the output immediately. An online system is not always a real time response system, but real time system must have an online capability.

**EVALUATION**

1. Define data processing.
2. State four data processing techniques.

**IMPORTANCE OF THE COMPUTER AS A TOOL FOR DATA PROCESSING**

The following are advantages of using computers for data processing:

1. Speeds: Computer operations (the execution of an instruction such as the addition of two numbers) are done at the speed of light i.e. data is processed at a very fast rate when using the computer.
2. Accuracy: The computer is very accurate when processing data, it is not prone to errors like human beings.
3. Reliability: Computers can work for long periods of time performing repetitive tasks without complaining and a user can be sure that a directive given to the computer will be carried out.
4. Storage: Computer storage is far more efficient such that the quantity of data stored at any point can be accessed anytime it is required.
5. Memory Capability: Computer systems can store a huge amount of data or information and they have total and instant recall of these data.
6. Exchange of information: Computer has the ability to exchange information quickly and easily with computers and other devices.
7. Efficiency and productivity can be raised.
8. Running cost becomes lower in the long term.
9. Overall security can be raised due to less human intervention.

It may be noted however that, the use of computer for data processing has its own disadvantages: like, it is expensive, it requires trained personnel and it is costly to maintain.

**GENERAL EVALUATION**

1. Define data processing.
2. List any four processing techniques.
3. Give two advantages of using computer to process information.
4. Give two disadvantages of using computer for data processing.

**WEEKEND ASSIGNMENT**

1. The …… is a technique by which a number of jobs (data) are input into the computer system at the same time and the computer is made to execute those jobs, one after the other in sequence. (a) batch processing (b) on-line processing (c) time sharing (d) demand processing
2. Computer operations are done at a speed of …... (a) moon (b) electronic (c) Light (d) sun
3. …….. is a kind of processing whereby many terminals are directly connected to the CPU. (a) online processing (b) demand processing (c) time sharing (d) batch processing
4. In time-sharing processing, many users can work with the computer through terminals that are connected to remote distance.

(a) batch (b) time sharing (c) demand (d) online

1. A………….. system is one in which there are two or more processors that may be sharing the same main memory. (a) Multi processing (b) batch processing

(c) online processing (d) real time processing

**THEORY**

1. Write short note on the following:

(a) Batch Processing

(b) Real-Time Processing

(c) Time Sharing

(d) Online Processing

2. State six importance of using computer as a data processing tool.

**WEEK THREE**

**TOPIC: THE DEVICES**

**DEFINITION**

**CLASS OF DEVICES**

**DEFINITION OF A DEVICE**

Devices are instruments, equipments or machines made to perform specific functions.

**CLASS OF DEVICES**

Devices can be classified into four types:

* Early counting devices
* Mechanical devices
* Electrical device
* Electronic device
* Analogue device

**EVALUATION**

1. What is a device?
2. List the five classes of device.
3. **Early counting devices:** Examples of this include stones,pebbles,beads,fingers and toes,sticks,grains,marks on the wall etc.
4. **Mechanical devices:** mechanism consisting of a device that works on mechanical principles. Examples of this include ship, cart, sewing machine, motorcycle, car, typewriter, wheel barrow, Abacus, Slide rule, Napier bone, Pascaline, Jacquard’s loom, Babbage’s analytic engine
5. **Electrical devices:**  take the energy of electric current and transform it in simple ways into some other form of energy Examples include electric iron, electric kettle, blender, mixer, electric clipper, fridge, fan, washing machine, grinding machine etc
6. **Electronic devices:** are components for controlling the flow of electrical currents for the purpose of information processing and system control. Examples include photocopier, scoreboard, calculator, radio, camera, television, telephone and computer.
7. **Anologue:** They are used to measure things that change from time to time. Examples include: barometer, thermometer, weighing scale, rainguage etc.

**GENERAL EVALUATION**

1. What is a device?
2. List the five classes of device.
3. State the examples of devices.

**WEEKEND ASSIGNMENT**

1. \_\_\_\_ is an equipment used to perform specific function. (a) Devices (b) Computer (c) Analog (d) mechanical
2. Devices can be classified into \_\_\_\_ (a) 3 (b) 4 (c) 5 (d) 2
3. Which of these is not early counting devices? (a ) fingers (b) sticks (c ) Calculator (d) pebbles
4. Abacus is an example of \_\_\_\_ devices (a) Mechanical (b) Electrical (c) Computer (d) electrical
5. \_\_\_\_ is an example of electronic device (a ) Abacus (b) Computer (c ) Fan (d) ship

**THEORY**

1. What is a device?
2. List the five types of devices with examples.

**WEEK FOUR**

**TOPIC: TYPES OF COMPUTER.**

**CONTENTS**

There are three types of Computers namely:

**Digital computer**

**Analogue Computer**

**Hybrid computer**

**Digital Computer**

Digital computer system is a system or device using discrete signals or values to represent data numerically. They are computers that are used for counting and to work on numbers.

It works on data of non-continuous or discontinuous nature. Most digital representation in computing is based on the binary system. For example, the channel select on the television set is a digital device because it restricts you to a discrete set of channels. Another example is the digital wrist watch which shows you the exact time in digits and digital computers, calculator, microcomputer, digital ammeter.

**Analogue Computer**

These are computers that work on non-discrete or continuous data. In contrast to digital computers, they have continuous value. They are used to measure values that changes from time to time. Examples of such measurements are temperature, speed, weight etc. . They measure physical quantities and convert them to numbers. Examples of analogue devices are thermometer, speedometer, fuel gauge, electric meters ,petrol dispenser at petrol station and analogue ammeter.

They are mostly used in industrial operations.

**Hybrid Computers**

The high speed of analogue machine is combined with the flexibility of a digital machine. A hybrid computer is made up of digital and an analogue connect together in a system.

Hybrid computers are mostly used in scientific research and technical application because they count and measure. They have both ability to handle discrete and non-discrete data since the properties of analogue and digital are combined in hybrid computers.

**EVALUATION**

1. Mention the three types of Computers.
2. Write short notes on the three types of Computers.

**WEEKEND ASSIGNMENT**

1. How many types of computer do we have? (a) 1 (b) 2 (c) 3 (d) 4
2. Analogue computers work on \_\_\_\_ (a) non-discrete data (b) discrete data (c) data (d) digital
3. \_\_\_\_ computer measures physical quantities. (a) Digital (b) Hybrid (c) Analogue (d) none
4. \_\_\_\_ computer is used for counting? (a) Digital (b) Hybrid (c) Analogue

(d) continous

1. Which of these computers has the ability to handle discrete and non discrete?

(a) Digital (b) Hybrid (c ) Analogue (d) continuous

**THEORY**

1. List the three types of computers.
2. Write short notes on the three types of computers.
3. List any two examples each of digital devices and analogue devices.

**WEEK FIVE**

**TOPIC: USES AND APPLICATION OF COMPUTER**

**CONTENT**

**USES OF COMPUTER**

1. Computer can be used in computer schools, hospitals, government offices.
2. Computers are used for organizing data management and information.
3. It enhances the learning process with interactivity e.g students’ compact disk.
4. It aids communication system through e-mail, teleconferencing, telephone E-presence.
5. It is also used for word processing i.e. used to write letters, memos and documents.
6. Computers are used for graphical presentation such as production of all sorts of cards, letterheads calendars etc.
7. It is used for fun, excitement and relaxation through computer games.
8. It helps to plan schedule and control people resources and cost of project.

**APPLICATION OF COMPUTERS**

1. Computer in education: they are used as teaching aids in CAL (Computer Aided Learning) or CAI(Computer Aided Instruction).
2. Personnel administration: are required for the keeping of comprehensive records on employees.
3. Computer in business: is used for planning and forecasting using simulated scenarioss. For experience and solution.
4. Medicine: used to check health parameters of patients.
5. Banking: helps to solve large amount of bank dealings and operations.
6. Engineering: complex calculations and drawings are easily tackled.
7. Recreational activities: used for playing games for relaxation, fun and excitement.
8. Computer in art and music: the use of AutoCAD(computer aided drawings; amateur and professional musicians can compose or play and refine existing musical composition on computer.

**EVALUATION**

1. Mention five uses of computer in the society.
2. State five application areas of computers.

**ADVANTAGES OF COMPUTER**

1. Computers are fast.
2. They have large storage facilities.
3. Computers are very accurate.
4. It performs more operations that can be effectively performed manually.
5. Computer accommodates growth i.e enabling the organisation to move forward and compete effectively with other firms.
6. Provides immediate access to data i.e providing customers and clients with immediate responses to inquire about services rendered.
7. Assist with decision making i.e. delivering information n timely manner.

**DISADVANTAGES OF COMPUTER**

1. Computer systems are very expensive and not everybody could afford to buy one.
2. Computer is an electronic device that cannot think on its own i.e. garbage in garbage out (GIGO).
3. It makes some professional jobless.
4. Misuse of computer information can be extended to include computer crime
5. The uses of computer are limited to availability of electric power
6. Computers can easily be attacked by virus.
7. The uses of computer are limited to professional or educated users.

**GENERAL EVALUATION**

1. State five uses of computer.
2. State five areas of application of Computer.
3. State three for each the advantages and disadvantages of computer.

**WEEKEND ASSIGNMENT**

1. GIGO means …….. a) Garbage in Garbage out. b) Garbage indoor Garbage outdoor (c) Gate In Gate out d) all of the above
2. ………. is used for computer teaching aids. a)TAN b) CAN c) CAD (d) PAN
3. Computer is used in ……. to check health parameters of patients. (a) medicine (b) school c) industry (d) factory
4. Computers can be used for electronic advertising in form of electronic bill board a)true b) false c) none of the above (d) all of the above
5. ……….is used for fun, excitement and relaxation. (a) computer game (b) word (c) graphic (d) excel

**THEORY**

1. State five uses of computer.
2. State five areas of application of Computer.
3. State three for each the advantages and disadvantages of computer.

**WEEK SIX**

**TOPIC: ADVANTAGES AND DISADVANTAGES OF COMPUTER**

**CONTENT**

**ADVANTAGES OF COMPUTERS**

1. Computers are widely used for data processing because they possess certain advantages over manual labour by humans.
2. Computer can be used to process data at a faster speed.
3. **Increased access to the information stored in the resource centre.**
4. **Process data at an accurate rate.**
5. **It can be used to process a very large volume of transaction no matter how complex it may appear.**
6. **Reliable in its work.**
7. **It has a large storage capacity**
8. **It provides a better job quality.**
9. **Increased efficiency -**information stored on a computer database can be used for different purposes.

**DISADVANTAGES**

**Unemployment**

Different tasks are performed automatically by using computers. It reduces the need of people and increases unemployment in society.

**Wastage of Time and Energy**

Many people use computers without positive purpose. They play games and chat for a long period of time. It causes wastage of time and energy. Young generation is now spending more time on the social media websites like Facebook, Twitter etc or texting their friends all night through smartphones which is bad for both studies and their health and it also has adverse effects on the social life.

**EVALUATION**

1. **State four advantages of computer**
2. **State two disadvantages of computer.**

**Data Security**

The data stored on a computer can be accessed by unauthorized persons through networks. It has created serious problems for the data security.

**Computer Crimes**

People use the computer for negative activities. They hack the credit card numbers of the people and misuse them or they can steal important data from big organizations.

**Privacy Violation**

The computers are used to store personal data of the people. The privacy of a person can be violated if the personal and confidential records are not protected properly.

**Health Risks**

The improper and prolonged use of computer can results in injuries or disorders of hands, wrists, elbows, eyes, necks and backache . The users can avoid health risks by using the computer in proper position. They must also take regular breaks while using the computer for longer period of time. It is recommended to take a couple of minutes break after 30 minutes of computer usage.

**GENERAL EVALUATION**

1. Define data security
2. State the problems associated to data security.

**WEEKEND ASSIGNMENT**

1. The following are the advantages of computer a)it has high speed b) better job qualities c) reliability d)all of the above
2. Prone to fraud is one of the disadvantages of using computer a) true b) false c) none of the above
3. The use of computer creates unemployment a) true b) false c) none of the above
4. Computers can be used for electronic advertising in form of electronic bill board

a) true b) false c)none of the above

1. One of the following is not a disadvantage of computer. (a) health risks

(b) privacy violation (c) unemployment (d) reliability

**THEORY**

1. Mention seven advantages of computer.
2. State five disadvantages of using computer.

**WEEK SEVEN**

**TOPIC: MASTERY OF THE KEYBOARD I**

**CONTENT**

**DEFINITION**

**KEYBOARD**

Keyboard is an electronic device with several groups of keys electronically linked to the processor when attached to a computer system. It is the common input device used for entering data into the computer.

Thereare two main types keyboards used with micro – computer; they are:

1. Standard keyboard
2. Enhanced keyboard

**Features of Standard Keyboard**

* It has ten functions keys. (F1 - F10)
* It has four arrow keys
* It ha 84 – 89 keys

**Features of Enhanced Keyboard**

* It has 12 function keys ( F1 – F12)
* It has 8 arrow keys
* It has 101 – 105 keys

**Types of Enhances Keyboard**

1. Multimedia keyboard
2. Programming keyboard
3. Cordless keyboard

**Sections of the Keyboard**

Keyboard is basically divided into five sections;

1. Alphanumeric keys: These are made up of alphabets and numbers.
2. Function keys (F1 – F12)
3. Control keys: DEL, CTRL, esc and Alt
4. Cursor: Control the screen movement keys e. g. arrow, home, end, page up etc.
5. Numeric keypad: It is arranged in a calculator type structure.

**EVALUATION**

1. Define the keyboard.
2. State the two types of keyboard.
3. Mention five sections of the keyboard.

**WEEKEND ASSIGNMENT**

1. The types of enhanced keyboard include the following excpt. (a) multimedia

(b) programming (c) cordless (d) standard

1. There are …….. types of keyboard. (a) a (b) 3 (c) 2 (d) 5
2. The …….. has eight arrow keys. (a) standard (b) enhance (c) multiple

(d) intermediate

1. The…….. has ten functions keys. (a) enhance (b) standard (c) none of the above (d) none of the above.
2. ……….. key controls the screen movement keys. (a) cursor (b) numeric

(c) function (d) alphabet.

**THEORY**

1. Define the keyboard.
2. State the two types of keyboard.
3. Mention five sections of the keyboard.

**WEEK EIGHT**

**TOPIC: MASTERY OF THE KEYBOARD II**

**Correct Sitting Position**

* Make sure you have correct sitting posture to avoid back ache,eye strain and aching hands
* Adjustable seat back.
* Room to move your legs,
* Screen at comfortable height.
* Use anti-glare protector.

**Using the Keyboard to Type Names, Letter**

Use of software tutor e.g Mavis beacon typing tutor

Attempt using your ten fingers to type

Have a soft touch on the keyboard

**EVALUATION**

State the correct sitting positions for mastering keyboard typing acts.

**WEEKEND ASSIGNMENT**

1. The types of enhanced keyboard include the following excpt. (a) multimedia

(b) programming (c) cordless (d) standard

1. There are …….. types of keyboard. (a) a (b) 3 (c) 2 (d) 5
2. The …….. has eight arrow keys. (a) standard (b) enhance (c) multiple

(d) intermediate

1. The…….. has ten functions keys. (a) enhance (b) standard (c) none of the above (d) none of the above.
2. ……….. key controls the screen movement keys. (a) cursor (b) numeric

(c) function (d) alphabet

**THEORY**

1. State correct sitting positions for mastering keyboard typing acts.
2. State the uses of keyboard.

**WEEK NINE**

**TOPIC: SCREEN POINTING DEVICES**

A device with which you can control the movement of the pointer to select items on a display screen, is a hardware input device that allows the user to move the mouse cursor in a computer program or GUI operating system.

**Types of Screen Pointing Devices**

1. Mouse
2. Track Ball
3. Touch Ball
4. Joystick
5. Light pen

**Mouse**

A mouse is a pointing device used to control the movement of a pointer cursor in a graphical environment. It is an alternative to the keyboard.

The different versionsof mouse are as follows:

1. PS/2
2. Serial
3. Universal serial bus (USB)
4. Cordless

**Parts of a mouse**

A mouse is made up of the following parts:

1. Left button: This is used for clicking or double clicking an object.
2. Right button: It brings a task menu which contains some commands.
3. Mouse ball: This is a small round ball under the mouse which rolls or a mouse pad or smooth surface as the mouse is moved on the table.
4. Mouse pointer: This is a small arrow- shaped object that moves around on a computer screen and which is used to point at objects in a graphical operating environment.
5. Mouse cord: It is a tiny cord fixed onto the mouse for transferring signals to the processor

**EVALUATION**

1. List five examples of screen pointing devices.
2. Mention four different versions of mouse

**MOUSE TECHNIQUES**

Pointing: Move the mouse to move the on-screen pointer.

Clicking: Press and release the left mouse button once.

Double-Clicking: Press and release the left mouse button twice.

Dragging: Hold down the left mouse button as you move the pointer.

Right-Clicking: Press and release the right mouse button.

Select and deselecting objects.

**GENERAL EVALUATION**

1. List five examples of screen pointing devices.
2. Mention four different versions of mouse
3. State five parts of a mouse
4. State five mouse action techniques.
5. Differentiate between right clicking and left clicking.

**WEEKEND ASSIGNMENT**

1. A ………….. is a pointing device across a desk surface in order to point and select objects on the screen. (a) keyboard (b) scanner (c) mouse (d) light pen
2. The …… mouse button is the most frequently used. (a) Left (b) Right

(c) Center (d) Middle

1. The following are examples of screen pointing devices except ………. (a) mouse (b) joystick (c) light pen (d) keyboard
2. ………. is a tiny cord fixed onto the mouse for transferring signals to the processor. (a) mouse pointer (b) mouse cord (c) keyboard (d) track ball
3. ……… is used for clicking or double clicking an object. (a) left button (b) right button (c) mouse cord (d) track ball

**THEORY**

1. List five examples of screen pointing devices.
2. Mention four different versions of mouse
3. Briefly explain how a computer mouse works.

**WEEK TEN**

**TOPIC: FUNDAMENTAL COMPUTER OPERATION**

**CONTENT**

**Booting**

Booting is the process of starting the computer or preparing the computer for use.

**Starting up a Micro Computer System**

When the power button is pressed to boot up, the PC goes through a process called power- on – self test (POST). This POST enables the computer to read several files to remind itself what it should be doing and to perform a complex series of tests to make sure all its hardware components are working properly.

When the computer is booted up, an electrical current travels to the microprocessor and resets the chip to clear its memory. During reset, the microprocessor sends a command to the computer’s read only memory (ROM) chips to run the computer’s basic input/output system (BIOS) boot program. Thereafter, the boot program connects the hard drive, loading windows XP/VISTA/7 core system files through the microprocessor and loading the device driver software needed to allow communication between the operating system and the PC’s hardware.

After communicating with the video card to create the desktop environment, windows operating system then opens the Startup folder which is immediately accessed from the hard drive and loaded through the microprocessor into RAM, after which the computer is ready for use.

There are two types of booting:

1. Cold booting
2. Warm booting

**Cold booting:** The process of switching the computer by pressing the power switch on the system unit.

**Warm booting:** The process of restarting the computer by pressing the reset button on the system unit or by using the ctrl + Alt + Del key.

**EVALUATION**

1. Define booting.
2. List and explain the two types of booting.

**WEEKEND ASSIGNMENT**

1. The process of starting up computer is referred to as ………. (a) booming

(b) switching (c) booting (d) starter

1. The two types of booting are ….. and …….. (a) cold and warm booting (b) cold and hot booting (c) warm and hot booting (d) none of the above
2. The process of switching the computer by pressing the power switch on the system unit is called …… booting. (a) cold booting (b) hot booting (c) weather (d) cold
3. The process of restarting the computer by pressing the reset button on the system unit or by using the ctrl + Alt + Del key is called……… (a) cold booting (b) hot booting (c) warm booting (d) CPU
4. BIOS means ……………. (a) basic input/output system (b) base input/output system (c) boot inside/outside storage (d) basic inside/outside system

**THEORY**

1. Define booting
2. List and explain the two types of booting
3. State the acronym for the following: (i) POST (ii) BIOS