1. a) Define a system unit. (1 mk)

 Is the part which houses the brain of the computer.

b) Two functions of the control unit. (2 mks)

 i) Coordinate and controls all processing activities in the CPU.

 ii) Determine which operation or instructionto be executed.

2. a) Define a computer laboratories. (1 mk)

It is a special room set a side and prepared specifically fpr safe installation and use of computers.

 b) State two functions of the ups. (2 mks)

 i) Provides power temporarily in the event of a blastast

 ii) It regulates power from an unstable source.

 iii) Allow the user to switch off the computer correctly and save the work.

 iv) Safeguards the computer against damage.

3. Discuss the following types of computers. (2 mks)

 i) Dedicate purpose computers

- Are computers designed to perform a variety of tasks when given the software, but they have been set a side to perform a specific task.

 ii) Embedded computers

- Are computers that are incorporated or added onto other devices such as phones

4. State two advantages of using biometric devices in voting. (2 mks)

1) Becouse it is able to capture the voters’ attributes ie finger prints and facial recognition

 2) One cannot vote using other person’s voting card

 5. . *a)* A path

B File name

C File name extension / extension

 b)

* Identify file type
* Identify application software associated with the file
* Enable OS determine how to handle the file\
* Enables antivirus determine how to handle the file
* Enable easy categorization / indexing / fetching of files.

(Any one at 1 mark)

 (1mark)

c) Hard disk / magnetic disk / drive C (any One at 1 mark).

(1 mark)

6.a) State two types of database models. (2 mks)

 i) Flat file

 ii) Relational

 iii) Network

 iv) Hierchical (award a mark for any 2)

 b). Differentiate between COM ports and LTP ports (2mkS)

 - COM port also known as a serial port transmits data bit by bit

 - LTP port also known as a parallel port transmits multiple bits

 Simultaneously at a time.

c) By use of examples, differentiate between a function and a formula in spread sheets. (2 mks)

 - Functions are in built predicted formulae that the user can quickly used instead of having to create a new each time eg = Sum(B1+ B4)

 - A formula is a mathematical expressions that create a relationship between cells to return a ne value eg = D3 + D4

7. a) Differentiate between an Orphan and a widow with reference to word processing. (2 mks)

- An Orphan is the first line of a paragraph that appears as the last line of a page while a widow is the last line of a paragraph tat appears of the first line of a page.

* b) Dropped
	+ in margin

8. a) Explain industrial espioriage. (1 mk)

It is spying on a competitor to get information that can be used to cripple the competitor.

 b) Describe data encryption. (2 mks)

-It is done by mixing up into a form that only the sender and the receipt is able to -understand.

- The message to be encrypted is called plan text document.

 - After encryption an algorithm/ key is sent as a cipher text on the network.

9. Jane is a form three computer student; as she was working on her publisher document she noticed a letter A icon below the text box she was working on as shown below.



 a) What is the meaning of the icon (1mk)

 The size of the text box is small and as a result text could not fit or availability of hidden text hidden text.

 b) Advice Jane on how to get rid of the icon (1mk)

 Jane can do one of the following;

 i) Reduce the size of the text.

 ii) Increase the size of the text box.

 iii) Copy hidden text on another text box.

10. Describe the following terms as used in Microsoft Word.

(a) Text wrapping (1mks)

Text wrap is a feature that enables a text wrap to surround a picture or diagram with text.

(b) Column breaks (1mks)

Feature which is used to force the insertion pointer to move a new column in a page automatically.

11. (a)Explain the following errors as displayed in a spreadsheet cell

 (i) #### (1mk)

Column is not wide enough to accommodate the value or a negative date/time is used.

(ii) ##NUM! (1mk)

Use of invalid numeric values.

1. **Differentiate between the following terms as used in word processing (3marks)**
* Drop cap is a large character at the start of paragraph that occupies more than one line downwards while text case is capitalization of text ( you can switch from either lower or uppercase)
* A superscript appears just above the rest of the characters while subscript appears just below other characters while subscript appears just below other characters
* An indent is a white space at the beginning of each line while tabs are used to add uniform spacing in the line of text

13 (a) Webpage - a page in a website ***(1mark)***

 (b) Blog – a website which enables one to post or submit his or her personal details to a website; so that

 the details can be accessed from the website. ***(1mark)***

 (c) Hyperlinks – text or graphic which opens another webpage or website when clicked (***1mark)***

1. Web portal - a website that function as a point of access to information on the World Wide Web
2. **(a) DTP** - has several design templates for various publications
* Is more powerful in manipulating graphics / texts
* Enables formatting and manipulation of individual text and frames separately
* Enable complex document format printing

 **(b) Differentiate between the following**

 (i) Kerning – fixing visual denseness of pairs of character in text

 Tracking– spacing between characters in text

Margins – space around the text in the four edges of a document

 Column guides – non printable guides for column layout

15. a)i) Defragmentation – rearranging parts of files to consolidate scattered files on the surface of a disk into contiguous sector (1mk)

ii) Partitioning – dividing a physical disk into several logical drives (1mk)

 b. Headache – adjust screen brightness accordingly

Back & neck pain – Monitor should have a swivel base

* Use seats with backrest for upright posture
* Seats height be equal to screen height *(any correct two points max 1mark)*

17**. (a) What do you understand by the term page orientation?** (1 mark)

* Page orientation refers to the way that a piece of paper is aligned when you are creating a document.

 **b) State the two ways in which a page can be oriented (2 marks)**

* Portrait(tall)
* Landscape(wide)

c).i)A process of generating personalized letter / documents by e.g letter with an existing data source and combine it with addresses of multiple recipients at the same time.

 ii).

* + - Primary file (main document)
		- Secondary tile (data soure)
		- Merged tile (data source)

**d) Differentiate between insert and typeover modes**

In Insert mode, Ms-Word inserts characters as you type, and any new text you enter in the middle of a line is inserted between existing texts, characters or words while in Overtype mode is turned on, tying new text between existing words or characters automatically replaces the existing text by deleting it.

ii) **Cut and copy**

Copying text means making a duplicate of the text or object while cutting of text means relocating text from one place in a document to another (or changing the position of text or an object in a document).

e**) List three paragraph formatting activities in word processing.**

* Indentation
* Alignment
* Spacing
* Column
* Dropcap
* Bullets and numbering
1. List any THREE types of section breaks used in word. (2mks)
	* + Next page
		+ continuous
		+ Even page
		+ Odd page

18. a) Explain why a computer is able to display the correct time and date when it has just be switched on. (2 mks)

- Because it is set and stared in a special memory known as the complementary metal-oxide semiconductor (cmes) which is a powered cell.

b) Discuss two types of special memories found I computer system. (4 mks) i) Cache – Fast type of RAM found in the processor.

 ii) Buffers – Special memories found in the input/ output devices.

1. Register – Hold one piece of date at a time and are found in the ALU

c) i) Define a Bus with reference to a computer system. (1 mk)

 - Bus – This are electronic pathways or links

 ii) List to examples of buses. (2 mks)

1. Address bus
2. Data bus
3. Control bus

d) Distinguish between a power cable and interface cable. (2 mks)

- A power cable is used to transmit data from the source (socket) to the computer while interface cables are special cables used to connect peripheral cables to the system unit.

e) Differentiate between the different types of RAM. (4 mks)

 - Static RAM – is a fast type of RAM located inside the microprocessor

- Dynamic RAM – is a relatively slow type of RAM. It has the tendency for the stored charge to leak a way even with constant power supply hence requires periodic recharging.

1. (a) (i) State any THREE factors you would consider before installing an operating system.

 (3 marks)

*-The CPU specifications*

*-The Computers main memory*

*-The Hard disk space*

*-Application software compatibility*

*-Features of the OS version to be installed*

(ii) Distinguish between *software* *installation* and *software* *configuration* in relation to operating system (2 marks)

*-Installation is the process of copying program files into a computer so that they can be executed, while*

*-Configuration refers to the process of fine tuning or defining options provided by the installed software.*

(b) Abraham would like to distinguish between *System* *Tray* and *Task* *Manager*.

 (i) Where are these TWO found? (1 mark)

*-They are found in/on the TASKBAR*

 (ii) How are they different? (2 marks)

-*System tray is a section of the taskbar located at the right most part and shows icons of tasks running in the background but are not displayed on the screen. While,*

*-Task manager is the empty strip on the taskbar where the buttons of currently running tasks are displayed.*

(c) In relation to operating system, differentiate between;

(i) Kernel and Shell. (2 marks)

*-Kernel is the core of an operating system responsible for the management of hardware and software and OS resources. While,*

*-Shell is the interface provided for the user to interact with the operating system.*

(ii) Process and Page. (2 marks)

*-A PROCESS refers to an instance of a computer program that is being executed. While,*

*-A PAGE is a fraction of process. One process may have one or several pages.*

(d) Mobile Operating System (OS) is software that allows Smart phones, Tablet PCs and other devices to run applications and programs. List any THREE examples of Mobile Operating Systems

 (3 marks)

Examples of mobile device operating systems include;

* *Apple iOS,*
* *Google Android,*
* *Research in Motion’s BlackBerry OS,*
* *BlackBerry's Playbook OS*
* *Nokia’s Symbian,*
* *Nokia's Maemo OS,*
* *Nokia's MeeGo OS, LiMo OS, Tizen,*
* *Hewlett-Packard’s webOS (formerly Palm OS)*
* *Microsoft’s Windows Phone OS,*
* *Microsoft’s Windows 8,*
* *Palm's webOS,*
* *Samsung's Bada OS,*
* *The Jolla's Sailfish OS*
* *Mozilla's Firefox OS.*