

Answers paper one

NYR

1. *Identify programming language used in the following generations:-*
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 - (i) *First generations – machine language*
 - (ii) *Second generation – assembly language*
2. *Give importance of having the following in computer laboratory:-*
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 - (i) *Standard furniture in the laboratory*
 - *To avoid poor posture during machine use this may lead to strain injury and limb fatigue*
 - (ii) *Antiglare screen/monitor*
 - *To avoid eye strain and fatigue caused by over bright cathode ray tube monitors (CRT)*
 - (iii) *UPS*
 - *Temporarily supply to the computer to allow the user to save the work (power backup)*
 - *Stabilizes power (clean unstable power supplied from the main source to clean stable voltage)*
3. (a) *Explain the following terms as used in booting:-*
 - (i) *BIOS:- it's the basic input output system. it's special firmware program that Post to take place*
 - (ii) *POST:- Power on self test. It checks on existing drives, basic input/output devices and communicates in case of a problem.*(b) *Differentiate between:-*
 - (i) *Backspace and delete keys on the keyboard*
 - *Backspace and delete keys on the keyboard – erases character from the right while delete keys key erases from the left of the cursor.*
 - (ii) *Insert and type over mode*
 - *Insert and type over mode- in the insert mode when the text is inserted between words or character it pushes the existing text away without replacing it while in the type over mode when text is type between words or characters the new text automatically replaces the existing text by de letting it.*
4. *Explain the functions of the following central processing unit components*
 - (i) *ALU*
 - *To carry out all the arithmetic and logical operations (i.e mathematic computations and comparison of values)*
 - (ii) *Control unit*
 - *Coordinating all processing activities in the CPU as well as input,storage and output operations.*
 - (iii) *Primary memory*
 - *Provides storage location for data and instructions accessed by the control unit*
5. (a) *Differentiate between static RAM and Dynamic RAM*
 - *Static RAM is a very fast memory and holds its contents as long as there is power*
 - *Dynamic RAM holds the contents for a short while even if when the power is on.*(b) *Distinguish between compilers and interpreters*
 - *Compilers – translates the entire source program into object code.*
 - *Interpreters- translates the source code line by line*
6. (a) *List two softcopy output devices* *Speakers*
 - *Monitors*(b) *Distinguish between impact and non-impact printers citing one example in each*
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 - *Impact printers – these printers print using striking mechanism i.e they strike the paper*

in order to form an imprint on it. e.g dot matrix, daisy wheel, drum, chain and golf ball

- *Non impact printer :- they print using ink, thermal or laser mechanisms e.g laser, thermal,,ink jet, electrstatic*

7. *State two merits of using the following input devices:*

(i) Speech recognition

- *NO keyboard is necessary*
- *Useful in instruction where hand/eyes are too busy handling documents*
- *Can be used in remote locations via the phone.*

(ii) Touch screen

- *Faster in data entr.*
- *Can be used with non-computer literates.*
- *It's applicable to people with disabilities.*

8. *Differentiate between freeware and open source as end-user –license softwares.*

Freeware- software whose source code hidden from the users. Modifications only made by the manufacturer

- *Open source software whose source code is free made to the users. The users are encouraged to use ,modify and distribute the product.*

9. *(a) List four types of system software*

Operating Systems

- *Firmware.*
- *Utility Software*
- *Networking Software.*

(b) Explain the following functions of the operating system:-

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(i) Job scheduling:- the OS prepares, schedules, controls and monitors task submitted for execution, to ensure the most efficient processing.

(ii) Interrupt handling:- the processor stops executing the current process to attend to a

break from the normal sequential processing of instruction in program.

10. *Explain the following disk management tools:-*

(i) Disk formatting

- *It prepares a new disk for use by imprinting empty sectors and tracks on the surface of the disk so that the OS can recognize and make it accessible.*

(ii) Disk defragmentation

- *Arranging scattered files or folders on folders on a storage media for easy access of files and folders.*

11. *Differentiate between the following terms as applied in operating system:-*

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(i) Multi-user – OS allow more than one user to interactively use a computer.

(ii) Multi-tasking- when the OS allows the CPU to executes more than one application program at the same time

12. *Explain the following terms as applied in word processor*

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(i) Text wrap:- this feature allows a text to surround an object inserted

(ii) Word wrap:- the cursor move automatically to the next line after reaching the end of the line.

13. *(a) Distinguish between first line and hanging indentation*

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- *First line indent – the first line is indent while other are left along the margin*

- *Hanging indent- the whole paragraph is indent except the first line*

(b) differentiate between auto complete and auto correct features.

- *Auto complete feature displays a word when the user types the first few characters of the word*

- *While autocorrect feature automatically detects wrongly spelt or capitalized words and replaces them with the correct word*
14. (a) *Differentiate between the following combinations of terms:-*
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- (i) *Filtering and sorting:-*
- *Filtering:- This is displaying entities that meet a certain set criteria*
 - *Sorting:- This is arranging data in predefined order i.e ascending or descending*
- (ii) *Relative and absolute cell referencing*
- *Relative reference – cell references keep on changing automatically depending on their position in the worksheet. e.g when formula = B2 + C2 in cell D2 is copied to D3 it automatically changes to B2 + C3*
 - *Absolute reference – the copied formula in different cells does not adjust references. Its identified by adding a dollar sign before the parts of cell that do not change.*
15. *Identify the elements of a function*
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- Equal sign (=) function name and arguments*
16. *A class teacher of form 3E in Nzambani secondary school requested a programmer to design a program that would help do the following:-* **NYR**
- (a) *Enter the names of students and marks obtained in 8 subjects; maths, English, Kiswahili, Biology, Chemistry, Business Studies, History and Computer Studies.*
- (b) *After entering each subject mark the program should calculate for each student*
- (c) *Depending on the average mark obtained, the program should assign the grades as*
Between 80 and 100 = A
Between 70 and 79 = B
Between 60 and 69 = C
Between 50 and 59 = D
Below 50 = E
- (d) *The program should display each student's name, total marks and the average grade.*
- Using flow chart, show the design of the program*
17. (a) *Define the following terms in reference to the internet:-*
- (i) *Protocol:- set of rules that govern transmission of data or information over a network*
- (ii) *Website:- it's a collection of related web pages where individual or organization documents are placed for easy access by external world by using their address.*
- (iii) *Search engine:- it's a program that searches documents for specific keywords and returns a list of the documents where the keywords were found.*
- (iv) *Spam mail:- it's a feature in e-mail which inhibits receiving mails from unknown sources.*
- (b) *List three examples of search engines*
- *Google*
 - *Yahoo*
 - *Hotmail*
 - *Gmail*
- (c) *Identify the functions of the following devices in data communication:-*
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- (i) *Modem:- it's a special digital to analog interface card that changes data from digital to analog so as to be transmitted on telephone lines and on the receiving end the data is changed from analog to digital for computer to understand.*
- (ii) *Network interface card:- it's a circuit board that fits inside an expansion slot of a workstation and acts as a physical between the computer and the transmission media.*
- (iii) *Router: collection of routers in network.*
- (d) *Describe bounded and unbounded forms of communication giving two examples in each case* **NYR**

Bounded media – it is physical connection of communication devices mainly by use of cables e.g coaxial cables twisted pair , two wire cables and fibre optic cable.

(e) Outline four advantages of using fibre optic cables

- Low attenuation
- High bandwidth
- Immune to electromagnetic interference
- Very secure because they are untappable.

18. (a) Define the following terms as used in data representation

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(i) Amplitude:- the maximum value a wave can attain

(ii) Frequency:- the number of cycles made by a wave in one second

(iii) Nibble:- half a byte (4 bits)

(iv) Byte:- a group of 8 bits

(b) Perform the following $11111.1111_2 + 100001.1010_2 - 1111.00111_2$

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$$\begin{array}{r} 11111.1111 \\ + 10001.1010 \\ \hline \text{Answer } 110001.1001 \\ - 1111.0011 \end{array}$$

$$\text{Answer} = 100010.01011_2$$

(c) Using two's complement subtract 73 from 115 and convert the answer to decimal notation *NYR*

$$115 - 73 = 115 + (-73)$$

Convert 115 to binary = 1110011_2

Convert 73 to binary = 1001001_2

Convert 73 to 8-bits = 1001001_2

Convert the 8-bit above to ones complement = 10110110

Convert to two complement by adding 1 to ones complement above = 1100111101_2

Answer = 1100111101_2

(d) Identify the duties of the following ICT specialists

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(i) Software engineer

- Developing system and application software.
- Developing user and technical documentation for a new software.
- Maintain and update the software to meet day to day requirements

(ii) System analyst

- Design new and recommend change to existing one.
- Co-ordinate training for users of a new system.
- Repair system specifications
- Co-ordinate the implementation of the new system
- Prepare instruction manual

(e) List two types of opportunities available in the field of computer hardware

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- Computer technicians
- Computer engineers

19. (a) Describe the following computer files

(i) Logical and physical files

Logical files:- It's viewed in terms of what data items it contains and detail of what processing operation may be performed.

Physical files:- its viewed on how data is stored on a storage media.

(ii) Master and backup files

Master file – contains relatively permanent record about particular items or entities and

backup files

Backup files- it holds copies of others existing files.

(b) Explain the following computational errors

(i) truncation:- it occurs as a result of having a real numbers that have long fractional part can not fit in the allocated memory space

(ii) Overflow:- occurs as a result of having too long answer after calculation that can not fit in the allocated memory space

(iii) Rounding errors:- Results from raising or lowering a digit in a real number to the required rounded number

(c) Define data integrity and state three ways of minimizing threats to data integrity

- **Data entry- it's the accuracy and competences of data entered in a computer or received from an information system**

Ways of minimizing data threats are

- **backing up data**
- **using devices that capture data directly from the source**
- **designing user interfaces that minimizes invalid data reality**
- **using error detection and application areas of virtual reality**

(d) Define virtual reality and state three ways of minimizing threats to data integrity
Virtual reality – a condition in which a person becomes psychologically immersed in artificial environment generated by a computer system.

Areas of application

- **Aircrafts**
- **Military training**
- **Simulation**
- **Design evaluation**
- **Education**

(e) Discuss how computers are used in reservation systems

- **Hotels booking – booking of rooms online**
- **Airline booking – clients can book for a seat online**

20. (a) Explain the main activity carried out in each of the following system development stages

(i) Problem recognition :- identifying whether a problem exists.

(ii) Coding: - writing a program using a programming language.

(iii) Implementation: - file conversion, staff training and changeover strategies

(b) Explain the following changeover methods:-

- (i) Direct:- the old system is discarded and the new system starts immediately.**
- (ii) Parallel:- both old and new systems are run parallel to each other for some time till the users have confident with the new system then the old system is phased out.**
- (iii) Phased:-the new system is implemented in phases or stages.**

(c) Explain two advantages of modular programming

- **Easy to debug**
- **Easy to develop**
- **Its flexible**
- **Easy to read and modify**

(d) Explain how the use ICT may affect the society

- **Environment pollution due to poor dispose of computer parts**
- **Cultural effects**
- **Affecting user's health**
- **Effects on employment**
- **Automated production**

(e) Explain the four main areas of artificial intelligence

- **Expert systems-** soft that stores then knowledge of human experts and then used as consultant in a particular filed.
- **Natural language processor** – ability of a computer to understand human language and translate it to instruction upon which the computer can understand.
- **Voice recognition-systems** that allow voice input a microphone.
- **Voice synthesis** – machine able to create human voice or talk.
- **Computer vision** – computers to be able to process and interpret light waves like human being.
- **Robotics** – it’s a computer controlled device that emulate beings in carrying o ut tasks.

KKC

1. - **ROM (read Only Memory)** it is used to store programmed instruction and a data permanently or semi permanently.

- Data and instruction stored in Rom are those require to remain uncharged for long period of time
- **RAM (Random Access Memory)** its content can be read directly regardless of the sequence in which it is stored.
- Its contents is held temporarily and it content lost is lost once the computer is turned off.

Place Value	$8^3(512)$	$8^2(64)$	$8^1(8)$	$8^0(1)$
Octal digit	1	1	1	1

2.a) **Working out**

$$N_{10} = (1X8^3) + (1X8^2) + (1X8^1) + (1X8^0)$$

$$= 512 + 64 + 8 + 1$$

$$N_{10} = 585$$

$$\therefore 1111_8 = 585_{10}$$

b) **Solution**

**Weight
Binary
digit value
in bare 10**

2	2	.	2^{-1}	2^{-2}	2^{-3}
1	1	.	0	1	1
2	1	.	0	0.25	0.25

Integral part

$$(2^1X1) + (1X1^0) =$$

$$2.000 + 1.000$$

$$= 3.000_{10}$$

$$3.000_{10} + 0.375_{10} = 3.375$$

$$\text{Thus } 11.011_2 = 3.375_{10}$$

Fraction part

$$0.50 X 0 = 0.000$$

$$0.25 X 1 = 0.250$$

$$0.125X1 = + \underline{0.125}$$

$$0.375_{10}$$

3. i) **Cracking** refers to the use of guesswork over and over again by a person until he/she finally discovers a weakness in the security policies or codes of a software.

ii) **Hacking** is breaking codes and password to gain unauthorized entry to computer system data and information files.

b) - Data not to be transferred to other coutities without the owners permission

- Data and information should be kept secure against loss and exposure.
- Data and information should be accurate and up to date
- Data informatuor be collected used and kept for specified lawful purposes

4. - *Job scheduling can only handle one task at a time therefore, the operating system has to determine which task will be processed first and makes sure that the one that is currently being processed is closely monitored to avoid wasting time in the processor.*

- *Job sequence - the operating system keeps a list of jobs or tasks currently being run and clocks them in and out of processor.*

5. - *Avoid smoking or exposing computer to dust.*

- *Avoid carrying food and beverage to computer soon*

- *Avoid unnecessary movements because you may accidentally knock down peripheral devices.*

- *At all times following the current procedure for starting and shutting down the computer to avoid loss of data damage to computer programs.*

- *Do not open the metallic covers of computers or peripheral devices without permission and particularly when the computer power is still on.*

6. a) *Web page is the major page containing data i.e Text pictures clips etc while a website is a collection of web pages.*

b) - *Flat file*

- *Network*

- *Hierarchical*

- *Relational*

7. - *Computer operator is a person who enters data in a computer and keeps upto date records of all information processing activities.*

- *Computer technician is a person who troubleshoot computer hardware and software, assemble and upgrades computer components such as storage device and motherboards.*

8. *Mail Merge is the process of generating letter or documents by combining a main document.*

9. a) *advantage*

- *Utilizes the powerful like speed, accuracy to enable the user quickly accomplish tasks.*

- *Offers a large storage space on computer storage device to save and retrieve document.*

- *The user produces neat work due to lack of pencil pen work.*

- *Have better document formatting capabilities.*

- *Inbuilt formula that enables the user to quickly manipulate data.*

b) *Cell referencing identifies a cell or range of cells on the worksheet and show Ms cells where to look for the values or data needed to use in a formula.*

10. *Graphical based e.g adobe photoshop*

- *Coreldraw*

- *Harvard graphic*

- *Layout based.*

11. - *Data communications media – Optic fiber*

- *Communication devices e.g hub routers*

- *Networking software e.g network operating system.*

12. - *Financial system –payroll, accounting and banking*

- *Retail system – stock control, electronic point of sale.*

- *Reservation system*

- *Education system – computer aided instruction, aided learning.*

- *E – learning & computer simulation.*

13 a) **CD'S, CD- ROM, CD RW,CD –R**

DVD

LS – 120 SUPER DISK

OPTICAL CARD

OPTICAL TAPE

b) **Magnetic Disk, Floppy disks, Zip disks, Jaz disks**

15. a) **master file main file that contain permanent records of a particular entry.**

b) **Sequential organization**

Index –sequential organization.

SECTION b (60MARKS)

16. a i) **While – do structure**

ii) Repeat –until

b) i) **Assembler – translate assembly source program into object code.**

ii)Compiler – translate entire source program into object code

iii)Interpreter – translates source program line –by tine allowing the CPU to execute one line before translating the next.

b) 1. **Check the loop used**

The psendocode can use two looping structure

a **.If – then – else**

b. **Case structure**

2. Confirm that loops used can be able to give out the desired results.

3. See that the candidate has used appropriate amount and discount.

17. i) **employee because it has employee information**

ii)To ensure all records entered in the related table exists in the primary table.

iii)Is a unique identity of a record

iv)Employee number

v)The data is not similar

b) 1. **Input mark**

2. validation rule

3.Required

4. Indexed

c) 1. **To enhance security of data**

2. To share file between department

3. To reduce redundancy

4. To enable updating and deleting of data.

5. In faster searching of data.

18. a) i) **A - free/hierarchical topology**

B -Ring topology

C -Mesh topology

ii) **Point 1 and 2**

Terminator

iii) **Mesh topology**

iv) - **Modifying the topology**

- **Troubleshooting is difficult**

- **One device breakdown affects the whole system.**

v) **Identify the device labeled X in topology A – HUB.**

b) a. **Network protocol**

b. **Network Operating System**

c) i) **Repeaters – A device that receives signals from one send it to another segment.**

ii) Network hub – A device that connects computer onto network.

iii) *Fiber optic cables – transmission medium that transmits data by using light.*

iv) *Network interface (NIC) - A device inside the system box for linking them onto transmission medium.*

19. *Feasibility study – is the process of going out of the field to identify information that is related to an organization.*

b) 1. *Main memory*

2. *Input/output devices*

3. *Processor*

4. *Secondary storage.*

c) i) *Truncated – Errors that results from having real numbers that have a long fractional part.*

ii) *Transposition – Errors that result from incorrect reading of source document.*

iii) *Transcription – errors that occur during data entry.*

d) 1. *ASCII(American Standard Code for Information Interchange)*

2. *EBCDIC (Extended Binary Coded Decimal Interchange Code)*

3. *BCD (Binary Coded Decimal)*

e) *Online - data processed immediately it is received*

Real time – the incoming data is processed as soon as it occurs.

f) i) *Advantages*

It is fast in processing commands as compared to GUI and means driven interface.

Disadvantage.

- *It is difficult to the users because they need to memorize command*

- *Single tasking and can not support more than one task.*

20. a) i) - *Chatting*

- *E-mails*

- *Video conferencing*

ii) *Links – A text or picture that when clicked causes other web pages to be opened.*

URL – A special internet address made up of organization name and an extension explaining to type of organization and country.

b)

	<i>A</i>	<i>B</i>	<i>C</i>
<i>1</i>	<i>Crop</i>	<i>Amount</i>	<i>Not Viable</i>
<i>2</i>	<i>Maize</i>	<i>150</i>	<i>Not Viable</i>
<i>3</i>	<i>Bean</i>	<i>300</i>	<i>Not Viable</i>
<i>4</i>	<i>Cashew Nuts</i>	<i>850</i>	<i>Moderate</i>
<i>5</i>	<i>Cabbages</i>	<i>1036</i>	<i>Viable</i>

c) i) *Triple click*

ii) *Hold down ctrl as you drag the mouse pointer.*

d) i) *A window is a rectangular feature where an application is running and bears close, minimize and restore button while orphan is body without heading.*

ii) *Cut and copy command.*

Cut – move or transfer text of file from the original location to another without leaving a copy

Copy – duplication of text or files i.e a file retains its original location and appears in another location.

e) - *To emphasize the beginning letter enlarge on a paragraph.*

f) i) *Expert system – is a system developed and installed in an office using the intelligence of human being.*

ii) - *Hospital*

- *Education*

- *Other scientific department.*

MUM

1. **State two functions of the SHIFT key as used in a word processor.** *
 - Activating from upper case to lower case and vice versa
 - Enable one to type extra characters on the key board like ?, !, & e.t.c.
2. **a) How do registers differ from buffers.** *
 They store more than one piece of data and they have a bigger memory capacity
(b) List four examples of registers. *
 - Program counter
 - Stack pointer
 - Instruction register
 - Index register
3. **Daniel has noticed the following problems in his computer;** *
 - (i) It is taking a longer time to start up.
 - (ii) It is often hanging
 - (iii) Applications are taking long to load.
 - (iv) State three possible causes of these problems and how they can be solved.
 - Virus attacks
 - Processor over heating
 - Small capacity of RAM
4. **List three functions of an anti-virus software.**
 - Detecting viruses in a computer
 - Cleaning computer viruses
5. **Differentiate between a virus and a logic bomb.** *
 - A virus attacks both the hardware and software while a logic bomb attacks hardware at a specific time it has been programmed to.
6. **The cells K3 to K10 of a worksheet contain remarks on students performance such as very good, good, fair and fail depending on the average mark. Write a formula that can be used to count all students that have the remark “very good”.**
 - Count if (K11, “Very good”)
7. **The following information shows the income and expenditure for “Beba yote” matatu for five days.**
 The income from Monday to Friday was Ksh.4,000, 9,000,15,000 and 20,000 respectively while expenditure for some period was Ksh.2000,3000, 7000, 5000 and 6000 respectively.

(b)

- a) **Draw a spreadsheet that would contain the information. Indicate the rows as 1 , 2, 3 and 4 and the column as A,B,C**

	A	B	C	D	E	F
		MON	TUE	WED	THUR	FRI
1	Income	4000	9000	15000	20000	
2	Expenditure	2000	3000	7000	5000	6000
3						

- b) **State the expression that would be used to obtain:**
 - (i) **Monday profit.** = $B1 - B2$
 - (ii) **Total income** = $\text{Sum}(B1 : F1)$
 - (iii) **Highest expenditure.** = $\text{Max}(B2 : F2)$
8. **Describe the following terms:**
 - (a) **Software suite :- A group of programmes that are sold together e.g. MS office which contains MS word, MS excel, MS access e.t.c.**
 - (b) **Shareware:- Is copyrighted software that is distributed free of charge but requires users**

to make a monetary contribution in order to continue using it

(c) Groupware:- Online software that allows several people to collaborate on the same project

(d) Integrated software:- A software that combines features of different programs as a whole

9. *(a) Subtract 0111_2 from 1001_2*

1001_2

0111_2

010_2

(b) Using two's complement subtract 7 from 40 and give the answer in decimal notation.

10. *Distinguish between uploading and downloading.* *

- *Uploading – sending information from a local computer to a remote computer on the internet*
- *Downloading – transferring information from a remote computer on the internet to a local computer*

11. *Distinguish between peer-to-peer Networks and client-server networks.* *

- *Peer to peer networks are equal in a network while client server networks contain a computer called a server that serves other computers called clients*

12. *List any two techniques used to implement information systems in various organizations.*

- *Direct*
- *Parallel*
- *Pilot*
- *Phased*

13. *Distinguish between a word and word-length as used in data representation.*

- *Word is a general term that can mean a single character or a group of characters while a word length is a measure of the NO. of bits in a word.*

14. *Describe three types of maintenance that can be applied on information systems.* *

- *Perfective maintenance*
- *Preventive maintenance*
- *Adaptive maintenance*

15. *(a) Study the flowchart extracts below* *

(b) State the looping structure demonstrated in *

(c) List any four methods of detecting and correcting programming bugs.

(d) Draw a flowchart for a program that can be used to add any positive integers that can be keyed into the computer through the keyboard. The program should count the positive numbers entered and should be terminated when a zero is keyed in.

15. *a) Study the flowchart extracts below*

i) While .. Do

ii) Repeat... Until

b) State the looping structure demonstrated in

- *Debugging utilities*
- *Dry running*
- *Using test data*
- *Using translator programs*

c) List any four methods of detecting and correcting programming bugs.

16. *Below are two table structures of files in a database:*

TABLE 1

<u>Field</u>	<u>Data type</u>
Employee number	Text
Employee Name	Auto number
D.O.B	Date/time
Address	Test

TABLE 2

<u>Field</u>	<u>Data type</u>
Employee number	Number
Data employed	Date/time
Department	Test
Salary	Currency

(i) Which of the two tables is likely to be the parent table?

- *table 1*

(ii) *It is advisable to enforce referential integrity when creating a relationship. When creating a relationship, what do you understand by the term referential integrity?*

- *Is a feature that ensures that a record in a child table exists in a parent table*

(iii) *The field “employee No” in Table 2 is likely to be the primary key.*

What is a primary key?

- *Is a special index that uniquely identifies a record to avoid duplication of data*

iv) *Which fields in both tables is most appropriate for creating a relationship?*

- *Employee number*

(v) *What will make the relationship between the tables fail to work?*

- *Linking fields have different data types*

(b) *In databases, the field properties specify finer details related to the fields and the entries expected. State four field properties.*

Caption

- *Input mask*
- *Field size*
- *Required*
- *Validation rule*
- *Validation text*

(c) *State three functions of a database.*

- *-Storing records*
- *Arranging records for easy retrieval*
- *Updating and modifying records*

17. (a) *Explain three communication services offered through the internet.*

- *Electronic mail*
- *Internet radio*
- *Voip (vice over internet protocol)*

(b) *Describe the following internet terms.*

(i) *Browsing:- Moving around and between web pages*

(ii) *Web portal:- Website that contains several features like searching, e mail, advertisements, e.t.c.*

(iii) *Home page:-First page displayed when a browser is started*

(iv) *Hyperlink :-Text or graph when clicked links one to another web page or links*

(v) *Uniform resource locator:- An address of a web page*

(c) *The following spreadsheet is relating to a farmer.*

	<i>A</i>	<i>B</i>	<i>C</i>
	<i>CROP</i>	<i>Amount</i>	
<i>1</i>	<i>Maize</i>	<i>150</i>	<i>Not viable</i>
<i>2</i>	<i>Beans</i>	<i>300</i>	
<i>3</i>	<i>Cashew nuts</i>	<i>850</i>	<i>Moderate</i>
<i>4</i>	<i>Cabbages</i>	<i>1036</i>	<i>Moderate</i>

(i) *A function = IF (B2< 200, “Not viable”, IF(B2>300,”moderate”, IF(B2> 1000, “VIABLE”)))).*

Give the appropriate result returned in cells C2, C3, C4 and C5.

(d) *List any three functions of the control unit.*

- *Executing tasks*
- *Controlling all devices within the CPU*
- *Monitoring activities within the CPU*

18. (a) *List any three differences between an interpreter and a compiler.*

<i>Interpreter</i>	<i>Compiler</i>
<ol style="list-style-type: none"> 1. <i>translates source program one statement at a time</i> 2. <i>Translates the program each time it is run hence slower than compiling</i> 	<ol style="list-style-type: none"> 1. <i>translates entire source code all at once</i> 2. <i>translated object code requires more memory space</i> 3. <i>compiled program can be stored in a storage media and run as required hence executes faster than interpreted programs</i>

(b) State four characteristics of Random access memory.

- *is volatile*
- *contents are user defined*
- *one can perform both read and write operations*
- *has high access speed*

(c) Describe the following data security measures

- (i) Log files:- Special computer files that keep a record of computer users and actions they have done within that particular computer*
- (ii) Fire walls:- Is software or hardware that filters information coming from the internet to your computer system*
- (iii) Antispyware :- A soft ware that blocks spy ware programs from accessing your computer system to collect information*
- (iv) Audit trial:- Careful study of an information system to determine weakness in order to collect them*

19. *(a) What is a transmission media?*

- *Channel that transmits data from one point to another. May be physical or non-physical*

(b) List two types of transmission media

- *Physical e.g. coaxial cable, fibre optic e.t.c.*
- *Non physical e.g. radio waves, infrared e.t.c.*

(c) Distinguish between a Hub and a switch.

- *A hub broadcasts data packets to all computers in a network and the recipient computer receives the packet while the others discard it while a switch directs a data packet to its intended destination computer*

(d) With help of a well labeled diagram, describe the fibre optic cable

- *Core – is the light transmission element at the centre of the optical fibre*
- *Buffer – used to shield the core and cladding from damage*
- *Strengthening material- surrounds the buffer, prevents the fibre cable from being stretched*
- *Cladding – Acts as a mirror by reflecting light back.*

(e) What are the functions of the following devices on a network?

- (i) Repeaters :- They amplify or regenerate signals that have been affected by attenuation*
- (ii) Network interface card :- Is an interface that links a computer to a communication channel*
- (iii) Router :- Is a network device that connects different networks to enable communication*
- (f) Distinguish between physical topology and logical topology as used in Networking*

- *Physical topology is the physical layout of computers in a network e.g. star, bus e.t.c. while logical topology is the way computers communicate on the network e.g. token ring, Ethernet*

1. Describe four electrical safety precaution rules that should be observed in a computer room. 4 mks
 - *Open/Bare cables should be insulated using tape cover or replaced.*
 - *Avoid overloading of sockets with several connection units.*
 - *Correct appliance power rating should be checked before plugging it on power source*
 - *Fire extinguisher should be in place containing Carbon dioxide*
 - *There should be NO water spillage in the room*
 - *Buy/replace with proper cables with correct/standard ratings*

2. Distinguish between a compiler and an interpreter 2 mks
 - *A compiler translates the entire source code at once before execution whereas An interpreter translates the source program one statement at a time.*
 - *Compiled programs require more memory as the object file are larger whereas Interpreted Object code takes less memory compared to compiled programs.*
 - *Compiled (Object code) can be saved on a storage media and run as required, hence executes faster while Interpreters translates the program each time its run hence slower than compiling.*

3. a) Describe the term key to storage systems? 1 mk
 - *These are systems that uses a keyboard and a visual display unit (VDU) for data input. Once data is keyed in, its stored on tape or disk.*

- b) Games programs can be purchased from computer stores on CD-ROM. State two advantages of CD-ROMS over floppy disks. 2 mks
 - *Mass storage compared to Floppy disks*
 - *Most computers have CD-ROM drives and not Floppy Disk Drives*
 - *CD-ROMs are not bulky compared to Floppy Disks due to their No. for a program installation.*

4. State two output devices that are found at the point of sale terminal. 2 mks
 - *Bar Code Reader*
 - *Thermal printers*
 - *VDU/TFT*

5. Outline any four editing features of a word processor. 2 mks
- *Spelling and Grammar Checker – Its an inbuilt tool that helps the user to correct spelling errors and Incorrect grammar structure.*
 - *Thesaurus – Its an editing tool that helps the user to find words or phrases with similar meaning (synonyms) or opposite (Antonyms) to the one selected.*
 - *Find and Replace – Used when you need to search for a word or phrase in a large document and replace incase you wish all at once.*
 - *Undo and Redo – Reverses the most recently executed command while Redo reverses back to the cancelled action.*
6. Describe briefly how a laser printer works. 2 mks
- *Operate by shining a laser beam to create an image on a rotating drum. As the beam hits the drum, it ionizes some regions which attract ink toner particles. The toner is then fused onto a piece of paper through heating.*
7. a) Identify the main stages of program development. 4 mks
- *Problem recognition*
 - *Problem definition*
 - *Program design*
 - *Program coding*
 - *Program testing and debugging*
 - *Implementation and maintenance*
- b) Define the term program documentation. 1 mk
- *Refers to the writing of formal support materials explaining how the program was developed, can be used by users, installed by operation and modified by other programmers.*
- c) List three program control structures giving examples. 3 mks
- *Selection e.g IF....THEN, IF.....THEN....ELSE etc*
 - *Sequence e.g START – Statement 1, Statement 2, END*
 - *Iteration (Loop) e.g WHILE loop, FOR loop, REPEAT....UNTIL loop*
8. Distinguish between high level and low level languages giving one advantage and one disadvantage of each of them. 2 mks

Advantages:

Low Level Languages

- *CPU understands machine language directly without translation*
- *They are stable and hardly crash or breakdown once*
- *Processor executes them faster as complex instructions are already broken down into smaller ones*

High Level Languages

- *They are portable i.e easily transferred from one computer to a nother*
- *They are user friendly & easy to use and learn*
- *More flexible hence they enhance creativity & increase productivity.*

Disadvantages

Low Level Languages

- More difficult & cumbersome to use and learn
- Require highly trained experts both to develop & maintain
- Debugging is difficult

High Level Languages

- Require large computer memory to run it
- Have to be interpreted or compiled to machine readable form before execution
- Their nature encourages use of many instructions in a word statement hence complexity of these instructions causes slower program processing.

9. a) Explain the difference between the following commands as used in MS-DOS. 2 mks

i) Dir/p

- Displays the directory contents i.e files, directories in a paused form should the contents be more than can be displayed all.

ii) Dir/w

- Displays directories and files in a wide format thus eliminating display of properties e.g date/time and file size etc

b) Write one command that can be used to format a diskette and copy system files to it. 1 mk

- Format/S (press enter key)

10. Differentiate between Real Time processing and Batch processing giving examples where each could be used. 2 mks

Real Time	Batch Processing
<p>- Computer processes the incoming data as soon as it occurs, updates the transaction file and gives an immediate response that would affect the events as they happen e.g Airline seats reservation</p>	<p>- Data is accumulated as a group (batch) over a period of specified time e.d daily, weekly pr monthly then processed at once e.g Payroll processing system.</p>

11. Differentiate between Computer Aided Design and Computer Aided Manufacture. 2 mks

- Computer Aided Design refers to an integrated system that allows products to be designed using design application softwares **WHEREAS**
- Computer Aided Manufacture are systems that allows products designed using design applications to be transmitted into an automated manufacturing systems for the product to be manufactured as per the computer model.

12. What is a computer network?

1 mk

- Refers to a collection of computers linked together using transmission media for the purpose of communication and resource sharing.

13. Describe three different types of computer network.

3 mks

- LAN – Computer Network that spans a relatively small geographical area like one building or school. Its usually owned by one organization however one LAN can be connected to other local area networks over any distance via data transmission lines or wireless media.

- *MAN – Network that covers a metropolitan area like a town or a city. The metropolitan area network size covers a radius of 5 – 50 km. Its infrastructure may be owned by a single company that has offices across a metropolitan area*
- *WAN – It's larger than MAN and covers a large geographical area e.g a country, continent or whole world. It consists of LANs and MANs connected together to form one large network e.g Internet.*

14. State three symbolic data representation. 3 mks

- *BCD (Binary Coded Decimal)*
- *EBCDIC (Extended Binary Coded Decimal Interchange Code)*
- *ASCII (American Standard Code for Information Interchange)*

15. State two properties that an operating system displays about a file. 1 mk

- *Size of the file in KB/MB*
- *Date and Time of creation/Modification*

SECTION II (60 MARKS)

Answer question 16 (Compulsory) and any other three questions from this section.

16. a) Distinguish between Algorithm and Pseudo code. 3 mks

- *Algorithm refers to a set of instructions whereas a Pseudo code refers to a mixture of English and Programming language.*

b) A company has 5000 CDs, DVDs, Video and books in stock. Each item has a unique 5 digit code with the first digit identifying the type of item i.e

- 1 = CD
- 2 = DVD
- 3 = Video
- 4 = Book

For example, for the code 15642 the 1 identifies that it is a CD, and for the code 30055 the 3 identifies that it is a video.

Write an algorithm, using pseudocode or otherwise, that

- Inputs the codes for all 5000 items
- Validates the input code
- Calculates how many CDs, DVDs, Videos and Books are in stock
- Outputs the four total

12 mks

```

Set count=0
C,d,v,b=0
Repeat
    input code
    x=code/10,000

    y=INT(x)
    if y=1 then c+1
    else if y=2 then d+1
        else if y=3 then v+1
            else if y=4 then b+1
                else print 'error'
            endif
        endif
    endif
    count=count+1
until count=5000
print c,d,v,b
    
```

17. a) List 3 differences in the computer training provided by colleges as opposed to those offered by the Universities. 3 mks

<i>Colleges</i>	<i>Universities</i>
<i>- They are approved to offer certificate, diploma and craft courses but some may not be approved.</i>	<i>- They are authorized to offer approved diploma, undergraduate & postgraduate programmes.</i>
<i>- They may be operating illegally thus offering low quality courses</i>	<i>- They are registered & accredited by the Commission of Higher Education or any other quality assurance body recognized worldwide.</i>
<i>- They may never be accepted i.e qualifications</i>	<i>- Accreditations leads to public acceptance.</i>

b) Describe three duties of each of the following computer specialists: 6 mks

i) Database administrator

- *Designs and develops applications for the organization.*
- *Setting up security measures needed to control access to data and information*
- *Keeping the database up-to-date by adding new records, modifying or deleting unnecessary records.*

ii) System Analyst

- *Co-ordinating training for users of the New System*
- *Working with programmers to construct and test the system*
- *Reviewing the current or manual or redundant information system and making recommendations on how to replace it with more efficient ones*

- c) Information technology has brought about a lot of concern in peoples lives - Social effects, list three arguments for and against Information Technology. 3 mks

Advantages:

- *Has led to creation of jobs*
- *Facilitated faster means of communication e.g mobiles & Internet thus reducing cost*
- *Has led to efficient & faster production e.g use of CAM & CAD*
- *Has led to widening of interaction level of people through social sites in the internet*
- *Been used as a campaign platform against AIDS and drug abuse*

Disadvantages:

- *Displacement of people in jobs due to lack of operational skills*
- *Widespread and promotion of promiscuity through web dating and other social sites*
- *Widespread of bad literature and pornographic materials through internet disposition*
- *Computer related crime e.g hacking, piracy, eavesdropping are on the increase*
- *Compromised moral integrity e.g in the case of one cheating by forging certificates/passports and other documents*
- *Has changed the way we talk, our privacy and our human rights and integrity e.g. exposure to flaming i.e writing online using derogatory/obscene or of dirty language*

- d) Repetitive Strain Injury happens when one overuses the computer keyboard or mouse, causing inflammation or injury on muscles or tendons. Describe three measures users can apply to prevent or reduce RSI. 3 mks

- *Have enough rest*
- *Sitting in a relaxed position*
- *Changing typing techniques*

18. A school computer laboratory is scheduled to undergo major renovations. The lab is scheduled to receive new computer whose specifications are given below:-

Pentium IV 2.8 GHz processor

40 GB HDD

3¹/₂ FDD

256 MB RAM

56 x CD ROM

17" SVGA TFT monitor

The computers are going to be networked and will be able to browse the Internet.

- a) Explain what is meant by the terms: 2 mks

i) FDD

- *An acronym for Floppy Disk Drive which the computer possesses for 3¹/₂ Size disks*

ii) HDD

- *An acronym for Hard Disk Drive which the computer possesses and its storage size is 40GB*

iii) SVGA

- *An acronym for Super Video Graphics Arrays*

- iv) TFT
- *An acronym for Thin Film Transistor monitor type*
- b) The computers are to be networked, name one extra device that should be fitted on every computer to enable this to happen. 1 mk
- *NIC (Network Interface Card)*
- c) The computers are to receive Internet facilities through the server on a dial up system. Name and describe the function of a special device that needs to be connected to the server to complete the connection. 1 mk
- *A MODEM*
- d) i) The school has chosen to apply the Star topology to link up the computers. List two advantages of this type of topology. 1 mk
- *Easy to configure*
 - *Allows centralization of key networking resources like concentrators and servers*
 - *Gives network administration focal point for Network*
- ii) Name the central device used to connect the computers in this topology. 1 mk
- *Hub*
- e) List two other types of topologies that the school could have opted for. 1 mk
- *Bus topology*
 - *Ring topology*
 - *Mesh topology*
 - *Tree/ hierarchical topology*
- f) List four advantages of using a network. 2 mks
- *Improves reliability e.g incase one computer breaks down, users can still access data and information from other computers on network.*
 - *Resource sharing i.e data/information, files, printers, modems, programs etc can be attached to the network for access by all users.*
 - *Distributed processing facilities*
 - *Remote communication i.e transfer of data signals between two communication devices located differently*
 - *Cost effectiveness. Although initial cost of laying down the network components may be expensive, the savings experienced and the value added to service delivery make them a ready choice for enterprising managers.*
- g) i) Data transmission via the Internet is done using a mode known as Packet Switching. Describe this data transmission mode. 1 mk
- *Refers to the process over the network of breaking down into discrete systematic steps the data transmission process and at each step a certain action takes place.*
- ii) Name two other modes of data transmission. 1 mk
- *Simplex Mode*
 - *Half Duplex & Full Duplex*

h) The school's LAN is done using UTP cable. List two disadvantages of using this type of cable. 1 mk

- *Don't have a shield that prevents EMI/electric noise*
- *Cables are susceptible to noise and signal interference*
- *Not suitable for environment that are electrically "noisy"*

i) List two disadvantages of using fibre optic cable in networking. 1 mk

- *A broken cable is difficult and expensive to repair*
- *Relatively complex to configure*
- *Installation is difficult because the cable must be carefully handled*
- *Connectivity devices and the media are expensive.*

j) Data flows in the school's LAN in a duplex manner. Discuss two other types of data transmission in networking giving examples. 2 mks

- *Half Duplex – communication is enabled in both directions within the network but one direction at a time*
- *Full Duplex – Communication occurs in both directions simultaneously within the computers that are sending and receiving data on a network.*

19. a) Differentiate between a Database and a DBMS. 1 mk

- *A database refers to a collection of structured and related data items organized so as to provide a consistent and controlled access to the items WHILE a DBMS is a software that facilitates the creation, organization and maintenance of databases.*

b) List four advantages of using database systems. 2 mks

- *Keep statistics of data items in a database*
- *Allows the user to add or delete records*
- *Updates or modify existing records*
- *Organize data for easy access, retrieval and manipulation of records*
- *Ensures security for the data in the database by safeguarding it against unauthorized access and corruption.*

c) In a database system, data integrity ensures the correctness and completeness of the data in the database. Differentiate the following types of integrity constraints:-

i) Validity Integrity 1 mk

- *Refers to the acceptable range of values an attribute can have. It ensures that No field takes on a value outside the range of valid entries.*

ii) Entity Integrity 1 mk

- *Rules that govern the composition of a primary key which cannot contain a null value and must be unique. Null values are empty spaces in a field that have No data.*

iii) Referential Integrity 1 mk

- *They govern the nature of records in a one-to-many relationships between tables in the database. All foreign keys in the child table must have a matching record in the parent table.*

d) Briefly describe the three database models.

3 mks

i) Hierarchical Model

- *Data items are arranged in a tree form. To access level 2 items, you have to first access level 1 data items. And a specific path leads to each item at a lower level.*

ii) Network Model

- *In this organization, links are created to express the relationship between the different data items forming a network of items. Access to one item can be through multiple paths and from any item.*

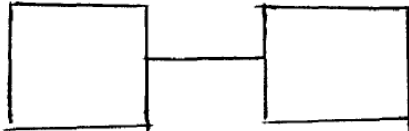
iii) Relation Model

- *In this organization, related data items are stored together in structures called relations or table. Relationship can be created between table such that a record or records from one table relates to another or other records in another table.*

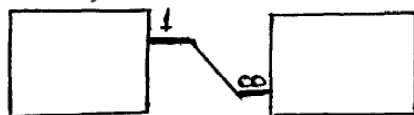
e) Using diagrams describe the following three types of relationships:-

3 mks

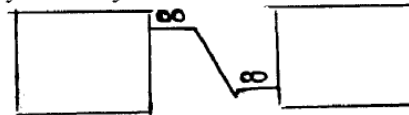
i) One-to-one



ii) One-to-many



iii) Many-to-many



f) File organization refers to the arrangement of records on secondary storage. Briefly describe the following file organization methods.

3 mks

- *Sequential – In this file organization, records are stored and accessed in a particular order sorted using a key field. Retrieval requires searching sequentially through the entire file record by record from the beginning to the end.*
- *Random/Direct file- In this file organization, records are stored randomly but accessed directly on a storage medium. To access a file stored randomly, a record key is used to determine where a record is stored on the storage media.*
- *Serial- In this organization, records in a file are stored and accessed one after another on a storage medium. The records are not sorted in any way on the storage medium.*
- *Indexed-sequential- Its similar to sequential only that an index is used to enable the computer to locate individual records on the storage media and each is a signed an index that can be used to access it directly.*

20. a) State and describe any two areas of Artificial Intelligence. 2 mks
- *Simulation of a house before the actual building is physically set up. A client can be allowed to virtually move through the house, pull drawers and touch objects all in a computerized environment.*
 - *Industrial simulation e.g car or plane crush test simulation that enables manufacturers to identify the weaknesses of the real situation or object hence put the correct reinforcement to their designs.*
 - *Training in Medicine e.g a surgical operation through the use of expert system that help medical professionals diagnose illnesses more accurately in the absence of human experts.*
 - *Military training e.g piloting and missiles launching*
 - *Assistance to the handicapped thro computers being used to control devices that help them*
- b) What is Virtual reality? 1 mk
- *Refers to a condition in which a person becomes psychologically immersed in an artificial environment generated by a computer system.*
- c) List three components of a Virtual reality gear. 3 mks
- *Head mounted display / head gear*
 - *Gloves*
 - *Body suit*
 - *Virtual reality software*
- e) State three factors to consider when selecting a UPS. 3 mks
- *Its voltage rating and the period of time it can provide backup*
 - *Type of hardware and the applications being run*
 - *The number of terminals it can connect*
 - *Its durability and Warranty it comes backed up with*
 - *Its price that determines its genuineness.*
- f) Give two uses of computers in stock exchange. 2 mks
- *Calculation of exchange rates*
 - *Analysis of stock exchange performance*
 - *Drawing of performance in stock exchange in graphs*

****PAPER TWO**

NYR

The question tested the candidates' ability to do the following in a database

- (a) award full marks for a created database with three tables bearing all the fields (3x4=12mks)
- (b) Award 1mk for each identified primary key fields in each table (1x3=3mks)
- (c) Award 2mks for each established relationship between the three tables (2x3=6mks)
- (d) Award 3mks for the records in each table (3x3=9mks)
- (e) Award 1mk for each identified field in the query i.e customer Name, Product Description, Quantity, Unit price and calculated field total payable by each customer and 1mk for saving with appropriate name.(1x6=6mks)
- (f) Award 5mks for a clearly generated report (5mks)
- (g) Award 1mk for the printed customers, products, transaction tables designs, query and the report

1. a) text typed as indicated (26 mks)
 - b)
 - Bolditacing (1 mk)
 - Italics (2 mks)
 - Justification (2 mks)
 - c) i) Columns (6 mks)
 - d) i) Double spacing (2 mks)
 ii) Searching and replacing (2 mks)
 iii) saving the document as A: NET 4 (2 mks)
 - e) i) Animated title (2 mks)
 ii) Landscape orientation (3 mks)
 - f) Printing NET 1, NET 3 and NETS (3 mks)
2. a) Availability of database with all fields (8 mks)
 b) Availability of all records (12 mks)
 c) Addition of data field (3 mks)
 d) Information entered as indicated (5 mks)
 e) Start 2 sorted in descending order (6 mks)
 f) Query indicating items delivered by Shah on 15/5/2001 (8 mks)
 g) Tabular report (4 mks)
 h) Print outs: start 1, start 3, query 1 and report 1 (4 mks)

Index No: _____			Index No: _____		
Item	Max score	score		Max score	score
Page Setup			A. - database file created	1	
Font-Arial	1		- File saved as Business	1	
Font size 12 for text	1		B. - Two tables created	1	
Left margin 1"	1/2		- 4 Correct fields for table 1	4	
Right margin 0.5"	1/2		- 5 Correct fields for table 1	5	
Top 0.5"	1/2		C. Seller details form		
Bottom 0.6"	1/2		- 4 fields @ 1/2 mk	2	
Headings			Vehicle details form		
H1			- At least 4 fields @ 1/2mk	2	
Bold	1		Forms titles		

Centered	1			- Seller details form	1/2	
Font size - 20	1			- Vehicle details form	1/2	
1st Paragraph				D. Table 1		
Two columns	1			- 5 correct records @ 1mk	5	
Word art	1			Table 2		
Words complete	1			- 10 correct records @ 1mk	10	
Word art diagonal	1			E. Query		
Two symbols @ 1/2mk	1			4 correct fields @ 1/2mk	2	
Subscript	1			- Correct criteria	1	
2nd Paragraph				- 6 records @ 1/2mk	3	
Complete text	1					
Drop cap	1			F. - 10 correct values for new prices @ 1/2mk	5	
In margin	1			Report		
3 lines drop	1			G. - 5 fields @ 1/2 mk	2 1/2mks	
3rd paragraph				- Correct total amount	1	
H2				- saved as report	1/2	
Bold and size 14	2			H. Printing		
Italic	1			- Seller details table	1	
4 bullets @ 1/2	2			- Vehicle details table	1	
Italicized text	1			- Report	1	
4th Paragraph				TOTAL		
3 columns	1					
Clip art	2					
Word art	2					
Clip art/Word art psn	1					
5th paragraph						
H3						
Bold and size 14	2					
Italics	1					
Drop cap	1					
3 lines drop	1					
Bold text	1					
Italicized text	1					
B. i) Paragraph copied	1					
ii).Hanging indent	1					
iii).- Double space	2					
- Landscape	2					
C. - Name	1/2					
- Index	1/2					
D. Word count						

- Words(376+/- 2)	1				
- Characters(With spaces)21,660 +/- 2	1				
- Characters(no spaces)1,800 +/- 2	1				
E. - Paginated doc x of y	1				
- Top	1/2				
- Center	1/2				
F. Doc saved as Bono2	1				
G. Printing Bono2	1				
TOTAL					

WE MUST STRIVE FOR GREAT THINGS IN LIFE

one should leave legacy that speaks for years. Paul Hewson was in Nairobi recently. That won't mean much to you, until I explain that I was referring to Bono, the world – famous lead singer of rock band U2 and campaigner against global poverty. Bono didn't really make much noise while in Kenya. He attended the [Nation Media] group's Pan Africa Media Conference, took H₂O, talked to a couple of journalists and left.

APART FROM BEING FAMOUS

He didn't do the other things that visiting celebrities of his stature do when in Africa: adopt a cheetah or a baby hippo, start a school for orphans, shoot the breeze pointlessly with Emilio and Tinga, utter banalties about the girl child. Bono reserves his energy for other things.

Popular Media

Bono is not famous just for being a singer. For the past couple of decades he has been one of the most visible humanitarian activists, using his fame to enlist powerful allies from:

- Government
- Religious institutions
- Philanthropic groups

- Popular media and
- The business world.

He has personally spearheaded the campaign for debt relief for the world's poorest countries, and has been a vocal champion for Africa. Not everyone agrees with these efforts. Author Paul Theroux savaged Bono, Bob Geldof and other celebrity humanitarians, saying that creating "the impression that Africa is fatally troubled and can be saved only by outside help – not to mention celebrities and charity concerts – is a destructive and misleading conceit."

I happen to agree with that view and have propagated it in writing for many years. I don't think Africa's salvation will come from outsiders,



and it certainly won't come from endless handouts and a crippling dependency culture.

On Trivia

What about you? How big is your life? Are you allowing your time on earth to be frittered away on trivia, or are you going to make a net positive impact on the planet? Are you doing something, anything bigger than yourself? Are you raising a child to be a better person than you are? Are running a business or conducting a profession that sets a standard in good practice? **Or are you content to be a small person imprisoned in a small life?**

He has personally spearheaded the campaign for debt relief for the world’s poorest countries, and has been a vocal champion for Africa. Not everyone agrees with these efforts. Author Paul Theroux savaged Bono, Bob Geldof and other celebrity humanitarians, saying that creating “the impression that Africa is fatally troubled and can be saved only by outside help – not to mention celebrities and charity concerts – is a destructive and misleading conceit.”

KKC

Question One.

- | | |
|---|-------|
| A. 1. (A) Complete typed letter | 7mks |
| Single error | ½ mk |
| More than 6 errors | 5mks |
| i) Saving main document | |
| Using correct name | 1mk |
| Using any other name | ½ mk |
| ii) Saving data source list | |
| Using correct name | 1mk |
| Using any other name | ½ mk |
| iii) Changing the Font Size, address and reference to 14 pts | |
| Changing each address | ½ mk |
| Changing reference | ½ mk |
| iv) Underlying reference | ½ mk |
| v) Merging Data source to the main document | |
| - Each filed at the right position. | ½ mk |
| - Each filed at any other position. | ½ mk |
| vi) Print the letters | |
| Each (1X3) | 3mks |
| B | |
| a) –Aligning title to the centre | ½ mk |
| underlining title | |
| b) – Adding border to the title | ½ mk |
| c) - Replacing all remain number with bullets | |
| - Not replacing one | -½ mk |
| - Not replacing more than 3 (0mks) | |
| d) i) Inserting the correct footer 2mks <i>Any other footer</i> | 1mk |
| ii) Inserting the correct header. | 2mks |
| <i>Any other header</i> | 1mk |
| e) - Line spacing of 1.5 | |
| -Line spacing other than Single | |
| f) Inserting word Art “computer” and not placing at the behind of text. | 2 mks |
| g) - Replacing “computer” with “PC” | 2 mks |
| - Replacing but not all words “computer” | ½ mk |

- | | |
|--|--------------------|
| h) Moving whole paragraph to end of document. | 2 mks |
| i) Font style set to Aerial Black. | 3mks |
| j) Saving with correct name other than document N
mk Using document N | 0mk ^{1/2} |
| k) Printing the document currently
Printing off page | 2mks
1/2 mk |

Question 2

- | | |
|---|---------------------------|
| a) Saving the workbook with correct name
- Using a different name
- Using default name book n no mark | 1mk

1/2 mk |
| b) All data entered correctly
- Every wrong entry
- More than 6 wrong entries | 20 mks
1/2 mk
-8mks |
| c) Renaming the sheet to “term one result”
- Default name sheet, No mark | |
| d) i) Correct totals and formula
ii) Correct averages and formula
- Manual calculation no mark | 2mks
2mks |
| e) Correct use of IF function to attain 3 conditions | (1X3) 3mks |
| f) i) Correct formula and ranking
ii) Correct use of the “count IF” function | (1X2)2mks |
| g) – Sorting list of class position in ascending order
- Sorting list by classes position in descending order
-No sorting, no mark | 2mks
1mk |
| h) i) Copying to new worksheet and renaming the new worksheet
ii)Filtering the “lower group”
- Display students from “E” class
- Students with average less than 50
- Filter shows a all students from E class
- Filter shows all students with average less than 50 | 2mks

4mks
2mks |
| i) i) – The chart is
- A bar graph
- Show 3 cats
- Shows names of students
- Title is TERM ONE COMPUTER RESULTS
- Missing a point
ii) Legend placed at the bottom of chart. | 3mks
-1/2 mk
1mk |
| iii) Saving chart on a new sheet and renaming the sheet graphical analysis.
- Saving chart as an object on the worksheet. | (1/2 X2) 1mk
1/2 mk |
| j) Printing
i)The lower group from “E” class
ii)The chart
iii)Term one results sheet | 1mk
1mk
1mk |