KCSE COMPUTER TOPICAL QUUESTIONS

For marking scheme,call/whatsapp Mdm Mariam@0746711892



'an investment of knowledge pays'

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Other available resources are;

- well summarised primary and secondary notes
- F1-F4 termly exams
- primary exams
- KCSE past papers
- KCPE past papers
- Mocks
- lesson plans
- schemes of work

Note:Exam questions are always free of charge

Marking scheme are not free

COMPUTER STUDIES

PAPER ONE

NYR

1. Identify programming language used in the following generations:-
   (i) First generations
   (ii) Second generation
2. Give importance of having the following in computer laboratory:-
   (i) Standard furniture in the laboratory
   (ii) Antiglare screen/monitor
   (iii) UPS
3. (a) Explain the following terms as used in booting:-
   (i) BIOS
   (ii) POST
   (b) Differentiate between:-
   (i) Backspace and delete keys on the keyboard
   (ii) Insert and type over mode
4. Explain the functions of the following central processing unit components
   (i) ALU
   (ii) Control unit
   (iii) Primary memory
5. (a) Differentiate between static RAM and Dynamic RAM
   (b) Distinguish between compilers and interpreters
6. (a) List **two** softcopy output devices
   (b) Distinguish between impact and non-impact printers citing one example in each
7. State **two** merits of using the following input devices:
   (i) Speech recognition
   (ii) Touch screen
8. Differentiate between freeware and open source as end-user – license softwares.
9. (a) List **four** types of system software
   (b) Explain the following functions of the operating system :-
   (i) Job scheduling
   (ii) Interrupt handling
10. Explain the following disk management tools:-
    (i) Disk formatting
    (ii) Disk defragmentation
11. Differentiate between the following terms as applied in operating system:-
    (i) Multi-user
    (ii) Multi-tasking
12. Explain the following terms as applied in word processor
    (i) Text wrap
    (ii) Word wrap
13. (a) Distinguish between first line and hanging indentation
    (b) Differentiate between the following combinations of terms:-
    (i) Filtering and sorting
    (ii) Relative and absolute cell referencing
14. (a) Differentiate between the following combinations of terms:-
    (i) Filtering and sorting
    (ii) Relative and absolute cell referencing
15. Identify the elements of a function
16. A class teacher of form 3E in Nzambani secondary school requested a programmer to design a simple program that would help do the following:-

(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 follows:-
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 students name, total marks and the average grade. Using a flow chart, show the design of the program

17. (a) Define the following terms in reference to the internet:-
(i) Protocol
(ii) Website
(iii) Search engine
(iv) Spam mail
(b)List **three** examples of search engines
(c) Identify the functions of the following devices in data communication:-
(i) Modem
(ii) Network interface card
(iii) Brouter
(d) Describe bounded and unbounded forms of communication giving two examples in each case
(e) Outline **four** advantages of using fibre optic cables

18. (a) Define the following terms as used in data representation
(i) Amplitude
(ii) Frequency
(iii) Nibble
(iv) Byte
(b) Perform the following $11111.1111_2 + 100001.1010_2 - 1111.00111_2$
(c) Using two' s complement subtract 73 from 115 and convert the answer to decimal notation
(d) Identify the duties of the following ICT specialists
(i)Software engineer
(ii) System analyst
(e) List **two** types of opportunities available in the field of computer hardware

19. (a) Describe the following computer files
(i) Logical and physical files
(ii) Master and backup files
(b) Explain the following computational errors
(i) Truncation
(ii) Overflow
(iii) Rounding errors
(c) Define data integrity and state **three** ways of minimizing threats to data integrity
(d) Define virtual reality and state **three** ways of minimizing threats to data integrity
(e) Discus how computers are used in reservation systems

20. (a) Explain the main activity carried out in each of the following system development stages
(i) Problem recognition
(ii) Coding
(iii) Implementation
(b) Explain the following changeover methods:-
(i) Direct
(ii) Parallel

(iii) Phased

(c) Explain **two** advantages of modular programming

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

(e) Explain the **four** main areas of artificial intelligence

MAT

1. Distinguish between white-collar crime and blue – collar crimes
2. Lutomia and Naibei were arguing about computer criminal. They realized four types of criminals namely; thieves, burglars, terrorists, hackers and cracker. Briefly explain difference between hackers and crackers
3. State where the cell pointer on a worksheet moves when the following key combinations
   a) Crl + Home
   b) Shift + Tab
   (c) End followed by down arrow key
   (d) Shift + Enter
4. Explain the meaning of the following domains on a web address
   (a) .co.ke
   (b) .ac.uk
   (c) .or.ug
5. Study the flow chart below and write down the output from the table below is entered. Show your working.

Nambwaya	59	60
Murono	60	62
Kisiang' ani	79	46
Makhanu	41	84

6. (a) Distinguish between a primary key and index key as used in databases
   (b) Explain the relevance of foreign key in a database entity
7. Briefly explain how the operating system uses interrupt Request (IRQ) numbers to allocate computer resources
8. Name an input or output device used in the following tasks
   (a) Capturing still images
   (b) Printing detailed architectural designs
   (c) Playing flight and driving games
   (d) Capture data at ATM
9. Outline **three** distinctions between a super computer and microcomputer
10. Briefly explain **four** features of third computer generation
11. Define the following terms as used with the internet;
    (a) Surf
    (b) Compose
    (c) Cookie
12. State **four** reasons why you would advertise a typesetter to use MS Publisher in designing calendar other than MS Word
13. Briefly explain how electronic spreadsheet is used in " What if analysis"
14. The formula = $A4*C$3 was entered in cell D4. What will be the formula if it is copied to cell F10
15. Design a pseudo code for a program that will compute and display the are of a triangle whose base is not less than 10cm

16. Study the flow chart below and attempt questions that follow
(a) Your working what will be output if the following was entered?

Lutomia	65	50	46	77	76
Naibei	60	80	55	81	10
Nambwaya	80	15	40	82	60
Makhanu	50	35	70	40	43
Kisiang' ani	30	70	55	60	44
Murono	60	45	43	77	30

(b) Write a pseudo code equivalent for the above flowchart modifying it to compute result of 100 students.
(c) Name any **two** control structures used in the flowchart above

17. (a) Explain **three** negative impact of ICT on Kenyan culture
(b) Perform the following arithmetic operations
i. $765_8 + 1645_8$
ii. $ABCH + D14_{16}$
iii. $7112_8 - 767_8$
iv. $A146_{16} - BCD_{16}$
(c) Name at least **two** areas where the following processing modes are used
i. Real time processing
ii. Distributed processing
iii. Batch processing
iv. Time sharing processing
(d)Write the alternative name of the following types of software
(a) Bespoke
(b) Vendor-off-the-shelf software

18. (a) Explain RAD and structured approach as methods of system development
(b) Hassan was designing in out screens for the new school database management system. Outline **three** factors she MUST consider during the designing
(c)State **four** difference between Low-level and High-level languages to a programmer
(d) Name any **four** public universities that offer computer courses at degree level

19. (a) Simplex, Half duplex and full duplex are modes o data communication. With examples of where used, explain each of these communication modes
(b) Distinguish between " wrap text" and " shrink to fit" as used in Microsoft Excel data formatting
(c) Safaricom has implemented broadband as their modem communication technique. Explain the meaning of broadband communication
(d) Continuous use of computers has adverse health effects. State **five** ways of averting these effects

20. (a) Artificial intelligence is out to develop devices that emulate a human being in all aspects as applied in expert systems. Explain **three** components of expert systems
(b) Distinguish between job replacement and job displacement
(c) State **four** ways in which threats to data integrity may be minimized
(d) Name **two** programming languages in each of the following:
i. OOPe
ii. Procedural language
iii. 5GLs

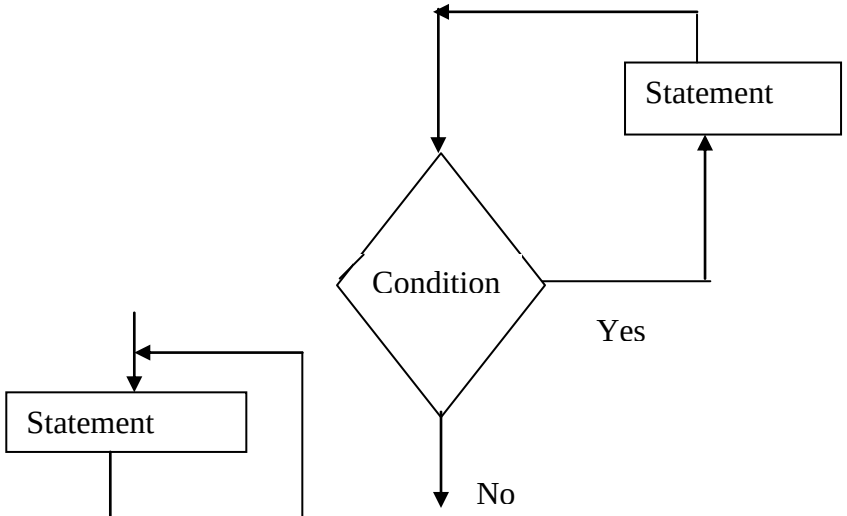
KKE

1. Distinguish between **ROM** and **RAM**. (2 mks)
2. (a) Convert the octal Number 1111_8 to its ten equivalent. (2 mks)
(b) Convert 11.011_2 to a decimal Number. (2 mks)
3. (a) Define the following terms with reference to computer crime.
(i) Cracking. (1 mk)
(ii) Hacking (1 mk)
(b) State any **two** laws governing the information. (2 mks)
4. Distinguish between **job scheduling** and **job sequencing**. (2 mks)

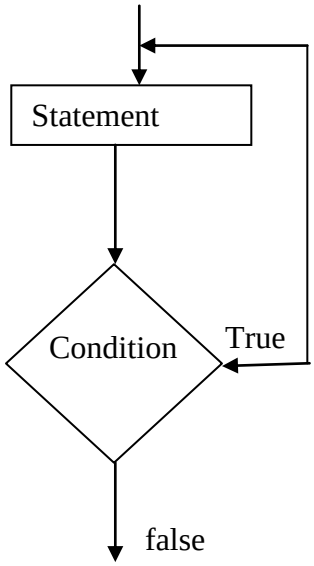
5. List any **four** precautions that must be observed in a computer lab. (2 mks)
6. Mention **four** database models that you have learnt. (2 mks)
7. Differentiate between **a computer operator** and **computer technician**. (2 mks)
8. Define the term **' mail merge'** . (2 mks)
9. (a) What is the advantage of electronic spreadsheet over manual work. (2 mks)
   (b) What is cell replacing? (1 mk)
10. State **two** types of desktop publishing (DTP). (2 mks)
11. List **three** elements of networking. (3 mks)
12. Briefly explain any **three** application areas of ICT (Information and communication Technology).
13. List any **two** types of
    (a) Optical disk. (1 mk)
    (b) Magnetic disk (1 mk)
14. Distinguish between **Disk formatting** and **disk partitioning**. (2 mks)
15. (a) State and define any **two** types of computer processing file. (1 mk)

Answer question <u>16</u> (Compulsory) and <u>any other three</u> questions in the spaces provided.

16. (a) Consider the module flow charts extracts below.
    (i)



    (ii)



    State the looping structure demonstrated in
    (b) State **four** examples of third generation languages.
    (c) Define the following terms as used in programming.
    (i) Assembler
    (iii) Translator
    (ii) Compiler
    (iv) Interpreter
    (d) Jokins retailers has two categories of customers processing category. " A" obtain 10%discount on all orders upto Kshs. 10,000. Otherwise the discount is 20% on entire order. Category " B" obtains 30% on all orders if the debt payment records is good otherwise the discount is 15%. Write a pseudo code for the order processing. (9 mks)

17. (a) Below are two tables structures of files in a database.

Employee		**Employee**	**Details**
Field	**Data type**	**Field**	**Date type**
Employee Name	Text	Employee No.	Number
Employee Number	Auto Number	Date employed	Date / Time
DOB	Date/ Time	Department	Text
Address	Text	Salary	Currency

(i) Which of the tables is likely to be the parent table? (1 mk)

(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**? (2 mks)

(iii) The field ' employee no' in the employee details table is likely to be the primary key. What is a **primary key**? (2 mks)

(iv) Which fields in both tables is not appropriate for creating a relationship? (1 mk)

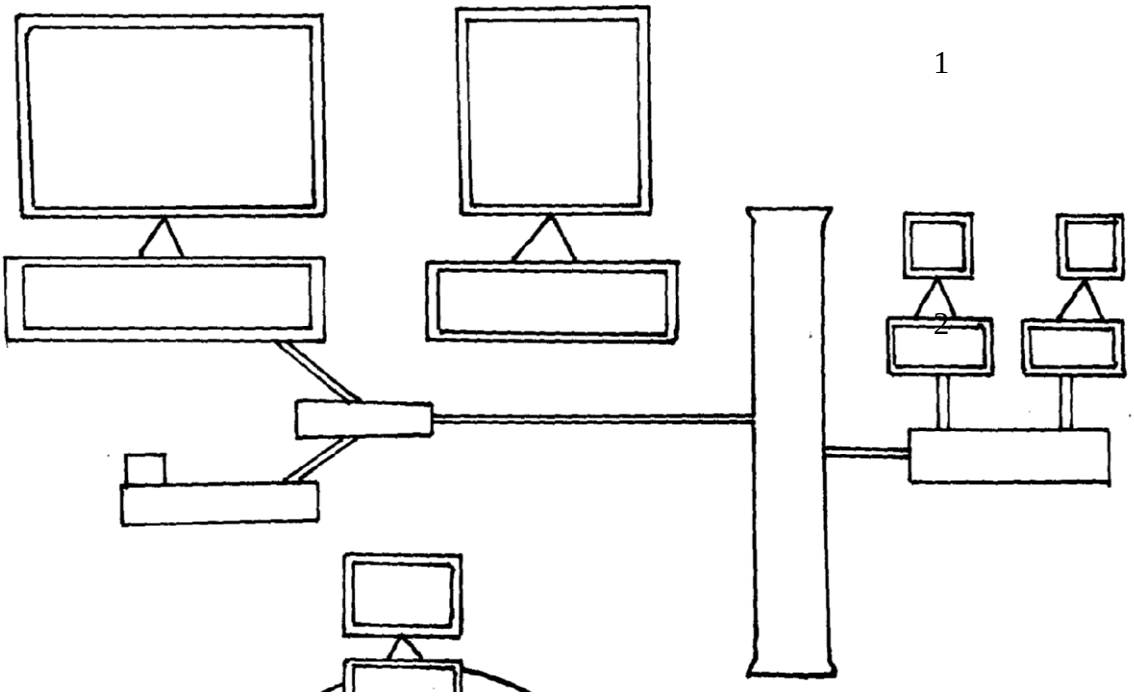
(v) What would make the relationship between the tables fail to work? (2 mks)

(b) In database, the field properties specify finer details related to the fields and the table entries expected. State **four** field properties. (4 mks)

(c) State **three** functions of a database. (3 mks)

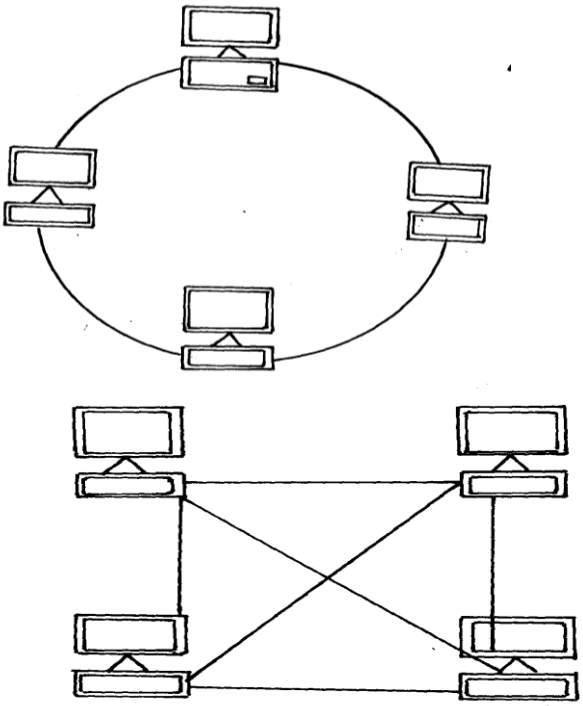
18. (a)Consider the topologies demonstrated in the diagram below.

A



B

C



(i) Identify the network topologies. (3 mks)

A .....

B .....

C .....

(ii) In topology **A**, identify the network device that should be at the end points **1** and **2**.

(iii) Which of the above topologies is likely to be used in a wide area network? (1 mk)

(iv) Highlight **three** disadvantages of topology **B**. (3 mks)

(v) Identify the device labeled **x** in topology **A**. (1 mk)

(b) State **two** main classes of network surface. (2 mks)

(c) Briefly describe the following as used in networking.

(i) Repeaters. (4 mks)

(ii) Network hub
(iii) Fibre optic cables
(iv) Network Interface Card (NIC)

19. (a) Define **feasibility study** as used in system. (2 mks)
(b) State **four** devices under direct control of the operating system. (2 mks)
(c) Briefly describe the following terms of computational error. (5 mks)
(i) Truncated
(ii) Transposition
(iii) Transcription
(d) Explain **three** most commonly used coding schemes. (3 mks)
(e) Distinguish between **online** and **real time processing**. (2 mks)
(f) State **one** advantage and **two** disadvantages of command line interface. (3 mks)

20. (a) (i) Explain **three** communication services offered through internet. (3 mks)
(ii) Describe the following terms. (2 mks)
Links
URL

(b) The following is a spreadsheet relating to a farmer.

	A	**B**	**C**
1	Crop	Amount	
2	Maize	150	
3	Bean	300	
4	Cashew nuts	850	
5	Cabbages	1036	

(i) A function = IF (B2<200, " Not viable" , IF (B2 > 300 " Moderate" , IF (B2> 1000, " viable"))))
Give the appropriate result returned in cell C2, C3, C4 and 5. (2 mks)
(c) Text can easily be selected using a mouse in word processing. How do you select;
(i) Multiple paragraphs? (2 mks)
(d) (i) Distinguish between a widow and an orphan in word processing. (2 mks)
(ii) Cut and copy commands.
(e) Give **one** purpose of drop caps on a text paragraph. (2 mks)
(f) Give **two** application of expert systems. (2 mks)

RCH

1. (a) Define the terms ' **Data Integrity'** . (1 mk)
(b) Give **two** features of data integrity. (1 mk)
2. Describe how each of the following printers work. (3 mks)
(a) Thermal ……
(b) Electrostatic printer ……
(c) Laser printer ……

3. Nina Secondary School wanted to buy some text books for Computer Studies. The following list show an example of a spreadsheet which was used to calculate the minimum, maximum and Total of the total price.

	A	B	C	D
1.	BOOK	UNIT PRICE	COPIES	TOTAL PRICE
2.	Computer Studies BK 1	250	70	
3.	Computers Studies BK 2	275	50	
4.	Computer Studies BK 3	280	60	
5.	Computer Studies BK 4	320	70	
6.				
7.	Minimum			
8.	Maximum			
9.	Total			

(a) Write down in each case the formula that can be used in:-
(i) Cell D7
(ii) Cell D8
(iii) Cell D9

(b) **Format** all the numeric figures **to US Dollar symbol** and **2 decimal places**. (1 mk)

4. State any **two** uses of personal computers in office. (2 mks)
5. State the difference between tracking and kerning as used in Page Maker. (2 mks)
6. (a) Differentiate between soft system and hard system. (2 mks)
(b) List any **four** characteristics of a system. (2 mks)
7. Explain the meaning of the following terms as used with operating system.
(a) Multitasking. (1 mk)
(b) Single user. (1 mk)
8. Explain the uses of the following keys on the keyboard.
(a) Backspace Key. (½ mk)
(b) Space Bar Key. (½ mk)
(c) F1 Key. (½ mk)
(d) Insert Key. (½ mk)
9. (a) Explain any **two** types of transcription error. (2 mks)
(b) Define the term ' **Algorithm errors'** as used in object oriented programming.
(1 mk)
11. (a) (i) What is meant by the term " **Upload**" as used in the internet?. (1 mk)
(ii) Explain the term **" hypertext."**
(1 mk)
(b) Give **two** examples of search engines you know. (1 mk)
12. (a) Name any **three** special purpose memories found either inside and outside the microprocessor.
(b) Distinguish between an accumulator and an address register. (2 mks)
13. (a) Define the term **" mail merging"** as used in Word Processing Application Program. (1 mk)
(b) List any **two** documents that are involved in mail merging. (2 mks)
14. Explain the **three** components of an expert system. (3 mks)
15. Define the term **Robot** as used in Expert system. (1 mk)
16. Kenya Tea Packers Company pays two different rates for all the tea grades of Tea delivered to her deports. The rates are as follows:- Grade A = Kshs. 20.00 per Kilograms and Grade B = Kshs. 10.00 per kilogram.
(a) Write an algorithm and pseudo code for the above program. (5 mks)
(b) Draw a flow chart for the above program. (5 mks)
(c) A school has two sets A and B. Write a structure algorithm to read a set and the points awarded for winning each race in an athlete final terminated by " C" . Calculate and print the total points gained by each set appropriately labeled. (5 mks)

17. (a) Define the term field properties as used in Database program. (2 mks)
(b) (i) What do you understand by the term normalization as used in Ms Access database? (1 mk)
(ii) What is an input mask in a database? (1 mk)
(c) (i) What is a query? (2 mks)
(ii) Differentiate between an action query and select query? (2 mks)
(d) (i) Differentiate between a Primary key and an Index key. (2 mks)
(ii) What is the difference between a field name and a Caption? (2 mks)
(iii) Differentiate between Columnar and Tabular form. (2 mks)

18. (a) (i) Give **one** advantage of a hub on a computer network. (1 mk)
(ii) Define the VSAT technology. (1 mk)
(iii) List any **four** examples of network operating systems. (4 mks)
(iv) State any **three** advantages of coaxial cables in a computer network. (3 mks)
(v) State any **three** devices used in data communications. (3 mks)
(vi) Differentiate between a router and a brouter. (2 mks)
(b) Define the term **" Protocol"** as used in networking. (1 mk)

19. (a) State the uses of the following MS-DOS commands.
(i) CD. (1 mk)
(ii) DIR/P/W (1 mk)
(iii) Input devices are classified according to how they are used to enter data. Can you list f**ive** classifications based on this. (5 mks)
(b) Name and explain **four** types of human computer interfaces. (4 mks)
(b) (i) Give any **two** control measures you would take avoid unauthorized access to data and information. (2 mks)
(ii) Give **two** examples of anti-virus software you know. (2 mks)

20. (a) Perform the following conversions appropriately.
(i) Convert $91B_{16}$ to Octal. (3 mks)
(ii) 376_{10} to hexadecimal. (3 mks)
(b) Perform the following Binary arithmetic.
(i) 1110.0111 + 1101001.011 (3 mks)
(ii) 1001011.011 – 111.111 (3 mks)
(c) Convert 298.125_{10} to hexadecimal equivalent.

KKE

1. State **two** reasons why personal computes are so important to small businesses and entrepreneurs
2. State **two** characteristics for each of the following;
   i. First generation computers
   ii. Second generation computers
   iii. Third generation computers
3. Give a reason for each of the following hardware considerations when selecting a computer system
   i. Processor speed
   ii. Warranty
   iii. Upgradeability and compatibility
   iv. Portability
4. (a) What is disk partitioning?
   (b) Give **two** reasons for partitioning a disk
5. Explain the following features as used in word processing.
   i. Word wraps
   ii. Thesaurus

6. The first column in the table below contains the formula stored in cell C10 of a spreadsheet. Enter the formulae as they would appear when copies to cell F15 of the same spreadsheet

FORMULA IN C10	FORMULA IN F15
=A5*B5	
=4*B$6	

7. State **three** functions of a database management system
8. (a) Differentiate between signing-in and signing – up in relation to the internet
   b) Distinguish between downloading and uploading
9. (a) Define the word expert system?
   (b) List the **three** components that make up an expert system
10. Using the **two** components, perform the following arithmetic operation in 8 bits
11. What is a procedural language?
12. List any **four** resources under the operation system control
13. State **two** advantages of the Winchester disk as compared to other forms of secondary storage media
14. a) List the **two** main type of DTP software
    b) Differentiate between the following terms as used in DTP
       Tracking
       Kerning
15. Explain the function of the following parts of the URL
    http:/www.kakamega.com
16. (a) Draw a flow chart for a program that can be used to get the sum of mark for 45 computer studies student then get the subject mean
    b) Define the following;
    i) Source program
    ii) Pseudo-code
    iii) Translators
    iv) Flowchart
    v) Algorithm
17. (a) Giving an example for each, differentiate between transcription and computational errors
    (b) Briefly describe the following elements of a computer file;
       (i) Character
       (ii) Field
       (iii) Records
    (c) Explain the functions of;
       i. Master files
       ii. Back up files
       iii. reference files
    (d) Differentiate between
       (i) Real-time processing mode and batch processing
       (ii) Distributed data processing mode and multiprocessing mode
18. a) State the function of;
       i) Web master
       ii) Database administrator
       iii) Computer operator
       iv) Computer technician
    b) Explain how computers have led to the following effects of employment:
       i) job replacement
       ii) Job displacement
    c) State **one** negative impact of computers in our society

19. (a) Describe any **three** physical LAN topologies

(b) **Define the following terms**

i) Protocol

ii) Server

iii) Gateway

iv) Repeater

v) Bandwidth

(c) Give **two** advantages of networking

(d) Explain the line of sight principle in wireless communication

(e) What' s the work of the following in networking?

(i) Crimping tool

(ii) Network interface card

iii) Network neighbouring icon

20. (a) Differentiate between private data and confidential data

(b) Describe **three** types of computer virus

(c) Explain the following terms as used in data security

i) Eavesdropping

ii) Surveillance

iii) Industrial espionage

d) Differentiate between hacking and cracking

e) State **two** laws that govern the protection of information

UGU

1. Differentiate between Access Time and Seek Time (2mks)
2. List **four** activities that can be carried out using Windows OS during disk management (4mks)
3. Give **four** reasons why a firm may decide to computerize its operations (4mks)
4. List **three** functions of the Arithmetic and logic unit (3mks)
5. What is the **major** difference between a web page and a web site (2mks)
6. (i) Write down all the digits in base 4 number system (1mk)

   (ii) Calculate the sum of the second and the fourth digits (i) above (1mk)
7. What is the major **difference between a webpage and a web site**? (2mks)
8. Differentiate between physical and logical topologies (2mks)
9. Give the difference between tower and desktop system unit (2mks)
10. Differentiate between computational errors and transcription errors (2mks)
11. Using the place value method, convert 247_{10} into its binary equivalence (4mks)
12. Perform the following binary arithmetic and give your answers in decimal notation (14mks)

    1010.101 + 11.011

13. (a) Differentiate between :

(i) Primary key and foreign key (1mk)

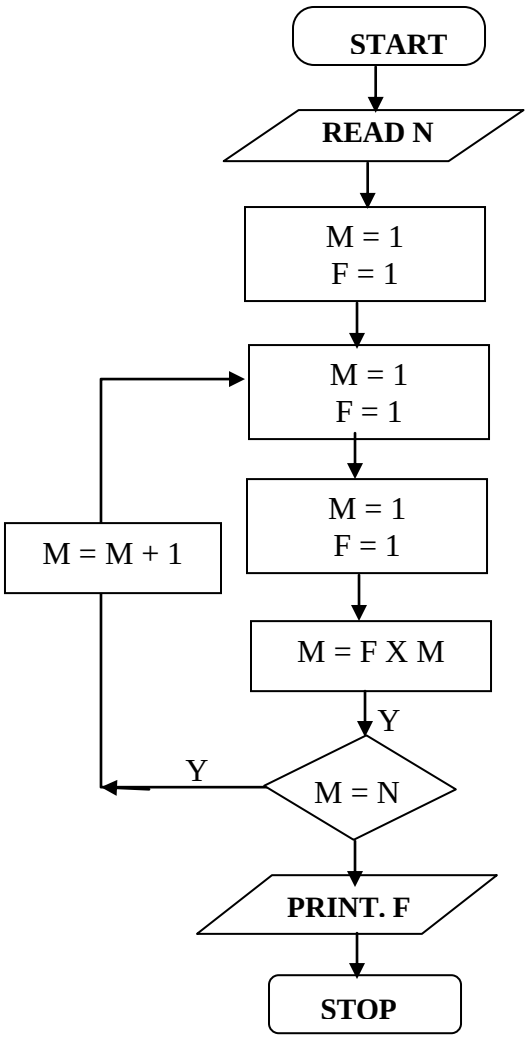
(ii) What is cell referencing (2mks)

14. Define the word blocking as defined in Ms-Word (1mk)

15. (i) What is a server? (1mk)

(ii) Differentiate between peer to peer and client server (2mks)

16. Study the flow chart below and answer the questions that follow:



(a) What would the following generate as output if the value of N at input was:

(i) 6?

(ii) 1?

(b) Write a pseudo code that does the same thing as the flow chart above (15mks)

(c) Text can be select using a mouse processing. How do you select

(i) Multiple paragraph

(ii) Vertical text

(d) Distinguish between:

(i) A widow and an orphan in word processing

(ii) Cut and copy commands

(e) Give **one** purpose of drop caps on a text paragraph

(f) (i) What is an expert system?

(ii) **Give two** applications of expert systems

17. A school keeps a spreadsheet of examination results in four subjects. Part of the spread sheet is as shown below:-

	A	B	C	D	E	F	G	H
	Name	**Class**	**Maths**	**Science**	**IT**	**English**	**Av. Mark**	**Pass/Fail**
1	Allen	11A	33	24	19	44	30	
2	Dyos	11B	41	54	70	31	49	
3	Keg	11A	82	69	57	52	65	
4	Khan	11C	44	21	50	85	50	
5	Kolacz	11A	73	51	73	51	62	
6	Lenski	11B	17	41	40	34	33	
7	Peruza	11C	87	72	64	61	71	

(i) Which column has been used to sort the data?
(ii) What formula has been entered in cell G2 to calculate the Allen' s average mark? could be done
(iii) The IT results need to be sorted so that the highest mark is at the top. Describe how this sort
(iv) The formula IF (G5>45, " PASS" , " FAIL") is entered in cell H5. What output appears?
(v) State the validation check that should be carried out on data entered in cells C2 to F8 to ensure values over 100 are not input (15mks)

18. (a) (i) Explain **three** communication services offered through internet
(ii) Describe the following internet terms:-
Links ……
URL……

(b) The following is a spreadsheet relating to a farmer

	A	B	C
1	Crop	Amount	
2	Maize	150	
3	Bean	300	
4	Cashew nuts	850	
5	Cabbages	1036	

(i) A function = IF(B2<200," Not Viable"), IF(B2>300, " Moderate"), IF(B2>1000," Variable"))).
Give the appropriate result returned in cells C2, C3, C4, and C5

18. (c) Text can easily be selected using a mouse in word processing. How do you select
(i) Multiple paragraph
(ii) Vertical block of text

(d) (i) **Distinguish between** widow and an orphan processing
(ii) Cut and copy commands

(e) Give **one** purpose of drop caps on a text paragraph

(f) (i) What is an expert system?
(ii) Give **two** applications of expert systems

19. (a) Explain the advantage of using two' s complement over one' s complement
(b) Using two' s complement, subtract 4 from 7 and give your answer in decimal notation
(c) An organization is planning to develop a new information system to manage its operations.
(i) Explain the following characteristics of a system
Holistic thinking
System entropy

(ii) List **four** tools that could be used in designing the information system during the design stage

(d) Explain **any three** threats to data and information

(e) Explain the purpose of the following types of program documentation
(i) User manual
(ii) Reference guide

20. (a) Define feasibility study as used in system
(b) State **four** devices under direct control of the operating system
(c) Briefly describe the following types of computerized errors:
(i) Truncated
(ii) Transposition
(iii) Transcription
(d) Explain **three** most commonly used coding schemes
(e) Distinguish between online and real time processing
(f) State **one advantage** and **two disadvantages** of command line interface

MUM

1. State **two** functions of the SHIFT key as used in a word processor.
2. (a) How do registers differ from buffers.
(b) List **four** examples of registers.
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.
State **three** possible causes of these problems and how they can be solved.
4. List **three** functions of an anti-virus software.
5. Differentiate between a virus and a logic bomb.
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" .
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.
(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
(b) State the expression that would be used to obtain:
(i) Monday profit.
(ii) Total income
(iii) Highest expenditure.
8. Describe the following terms:
(a) Software suite
(b) Shareware
(c) Groupware
(d) Integrated software
9. (a) Subtract 0111_2 from 1001_2
(b) Using two' s compliment subtract 7 from 40 and give the answer in decimal notation.
10. Distinguish between uploading and downloading.
11. Distinguish between peer-to-peer Networks and client-server networks.
12. List any **two** techniques used to implement information systems in various organizations.
13. Distinguish between a word and word-length as used in data representation.
14. Describe **three** types of maintenance that can be applied on information systems.
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.

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

TABLE 1

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

TABLE 2

Field	**Data type**
Employee number	Number
Data employed	Date/time
Department	Test
Salary	Currency

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

(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**? ***MUM***

(iii) The field " employee No" in Table 2 is likely to be the primary key.
What is a primary key?

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

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

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

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

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

(b) Describe the following internet terms. ***MUM***

(i) Browsing

(ii) Web portal

(iii) Home page

(iv) Hyperlink

(v) Uniform resource locator

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

	A	**B**	**C**
1	Crop	Amount	
2	Maize	150	
3	Beans	300	
4	Cashew nuts	850	
5	cabbages	1036	

(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.

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

(b) State **four** characteristics of Random access memory.

(c) Describe the following data security measures

(i) Log files

(ii) Fire walls

(iii) Antispyware

(iv) Audit trial

19. (a) What is a transmission media?

(b) List **two** types of transmission media

(c) Distinguish between a Hub and a switch.

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

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

(i) Repeaters

(ii) Network interface card

(iii) Router

(f) Distinguish between physical topology and logical topology as used in Networking

KSM

1. Describe **four** electrical safety precaution rules that should be observed in a computer room.
2. Distinguish between a compiler and an interpreter. (2mks)
3. (a) Describe the term keys to storage system (1mk)
   (b) Games programs can be purchased from computer stores on CD-ROM. State **two** advantages of CD-ROMS over floppy disks (2mks)
4. State **two** outputs device that are found at the point of sales terminal (2mks)
5. Outline any **four** editing features of a word processor. (2mks)
6. Describe briefly how a laser printer works (2mks)
7. (a) Identify the main stage of program development (4mks)
   (b) Define the terms program documentation (1mk)
   (c) List program control structures giving examples (3mks)
8. Distinguish between high levels and low levels language giving **one** advantage and **one** disadvantages of each of them (2mks)
9. (a) Explain the difference between the following commands as used in MS-DOS (2mks)
   (i) Dir/p
   (ii) Dir/w
   (b) Write **one** command that can be used to format a diskette and copy system files to it (1mk)
10. Differentiate between real time processing and batch processing giving examples where each could be used. (2mks)
11. Differentiate between computer added design and computer aided manufacture (2mks)
12. What is a computer network? (1mk)
13. Describe **three** difference types of computer network (3mks)
14. State **three** symbolic data representation (3mks)
15. State **two** properties that an opening system display about a file (1mk)
16. (a) Distinguish between Algorithm and Pseudo code. (3mks)
    (b) A company has 5000 CDs, video and books in stock each items has a unique 5 digit code with the first 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 these it is a video
    Write an algorithm, using pseudocode or otherwise, that
    -inputs the code for all 5000 items
    -validates the input code (12mks)
17. (a) List **three** differences in the computer training provided by colleges as opposed to those offered by the universities (3mks)
    (b) Describe **three** duties of each of the following computer specialists :- (6mks)
    (i) Database administrator
    (ii) System analyst
    (c) Information technology has bought about a lot of concern in people' s lives-social effects, list **three** arguments for and against information technology (3mks)
    (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 (3mks)

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

Pentium IV 2.8GHz processor
40GB HDD
31/2 FDD
256 MB RAM
568CD ROM
17" SVGA TFT monitor

The computers are gong to be networked and will be able to browse the internet.

(a) Explain what is meant by the terms:- (2mks)
- (i) FDD
- (ii) HDD
- (iii) SVGA
- (iv)TFT

(b) The computer is to be networked, name **one** extra device that should be fitted on every computer to enable this to happen (1mk)

(c) The computer is 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 (1mk)

(d) (i) The school has to apply he star topology to link up the computer. List **two** advantages of this type of topology (1mk)

(ii) Name the central device used to connect the computers in this topology. (1mk)

(e) List **two** other types of topologies that the school could have opted for (1mk)

(f) List **four** advantages of using a network (2mks)

(g) (i) Data transmission via the internet is done using a mode known as packet switching. Describe this data transmission mode (1mk)

(ii) Name **two** other modes of data transmission (1mk)

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

(ii) List **two** advantages of using fibre cable in networking (1mk)

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

19. (a) Differentiate between a database and a DBMS (1mk)

(b) List **four** advantages of using database systems (2mks)

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

(i) Validity integrity (1mk)

(ii) Entity integrity (1mk)

(iii) Referential integrity (1mk)

(d) Briefly describe the **three** database models :- (3mks)
- (i) Hierarchical model
- (ii) Network model
- (iii) Relation model

(e) Using diagrams describe the following three types of relationships (3mks)
- (i) One – on- one
- (ii) One – to- many

(iii) many-to-many

(f) File organisation refers to the arrangement of records on secondary storage. Briefly describe the following file organization methods:- (3mks)
- (i) Sequential
- (ii) Random /direct
- (iii) Serial

20. (a) State and describe any **two** areas of Artificial intelligence (2mks)
(b) What is virtual reality? (1mk)
(c) List **three** component of a virtual reality gear (3mks)
(d) By giving an example define:-
(i) A smart terminal (2mks)
(ii) An embedded computer (2mks)
(e) State **three** factors to consider when selecting a UPS (3mks)
(f) Give **two** uses of computer in stock exchanges (2mks)

TZM

1. The computer processing cycle involves a **four** step process **List them** (2mks)
2. The CPU consists of control unit and arithmetic logic unit **State the functions** of the two units (2mks)
3. Name and explain the **two** types of primary memory. (3mks)
4. **State the functions** of the following keys in a computer key board
(i) Pause (1mk)
(ii) Function keys (1mk)
(i) **Explain** the importance of microphones combined with speech recognition device such as voice output. (2mks)
(ii) **State the main** disadvantage of the above method of data input. (2mks)
5. The most popular type of electronic data storage currently is magnetic disk storage such as hard disk or Winchester disk. **Give reason** as to why they are popular (2mks)
6. **Outline two** advantages of hard disk over floppy disk. (2mks)
7. One stage of system development is system testing. **Outline** the advantages of this stage before implementation. (1mk)
8. (a) **Convert** 111.011_2 to a decimal notation. (2mks)
(b) **State one** advantage of using binary number system in computers. (1mk)
9. **State one function** of each of the following terms (3mks)
i) Buffer……
ii) An accumulator……
iii) Cache memory.....
10. **Explain any two** factors that should be put into consideration during output design. (2mks)
11. (i) **Define the term** graphic and give two examples (2mks)
(ii) **List any two** sources of graphic that can be used in Microsoft word. (1mk)
12. **State the functions** of the following logical functions as used in excel
a) If…… (1mk)
b) Sum If …… (1mk)
c) Count If…… (1mk)
(i) **Why** would one prefer to use a form for data input rather than entering data directly into a table. (2mks)
(ii) When using wizard to create a form, **list four** forms layout that you can use. (2mks)
13. **Distinguish between** the following terms as used in DTP (4mks)
(i) Tracking and kerning
(ii) Stroke and fill
14. (a) **Define** the following terms
(i) Structured programming (1mk)
Constants (1mk)
Variable (1mk)
(b) **Distinguish between** dummy data and real data as used in system testing (2mks)
(c) Mr Lugeno borrowed a loan of 200,000 from Ndege chai cooperative society at a rate of 10%payable in 2 years flat rate. **Draw** a flow chart that can be used to develop a computer program that will keep track of monthly repayments (5mks)

15. (a) **Define** the following computer crimes
    (i) Piracy (1mk)
    ii) Industrial espionage (1mk)
    (b) **Explain two ways** of protecting data and information against unauthorized access (4mks)
    (c) **Explain two functions** of network operating system. (4mks)
    (d) **Differentiate between** a repeater and a router as used in computer networking. (2mks)
    (e) **List down three** duties of a computer trainer (3mks)
16. (a) **Explain any two** types of human computer Interface. (4mks)
    (b) **State four** basic requirements of a standard computer laboratory (4mks)
    (c) **Out line three types** of job opportunities that are available in the computing field (3mks)
    (d)(i) **Differentiate between** video conferencing and telecommuting as used in communicating system (2mks)
    (ii) **Highlight two** advantages of telecommuting (2mks)
17. (a) **Distinguish between** the following
    (i) Sequential and serial file organization methods. (2mks)
    (ii) Random and indexed sequential file organization methods (2mks)
(b) **Explain the following** types of data processing modes
    i) Batch processing (2mks)
    ii) Real time processing (2mks)
    (c)**Define** the following terms
    i) Undo (1mk)
    ii) Redo (1mk)
    (d) **State three** breakthrough of Information Communication Technology (ICT) in health care (3mks)
    (e)**List any two** under graduate programs offered in public universities in Kenya (2mks)
18. (a) **Draw** a flowchart showing;
    i) The WHILE loop (2mks)
    ii) The REPEAT……UNTIL loop (2mks)

    (b) **Differentiate between** the following terms
    i) Information system and system (2mks)
    ii) Hard system and soft system (2mks)
    (c) **List** the seven stages of System Development Cycle (SDLC) (7mks)

PAPER TWO

NYR

QUESTION 1

M/s Ann Momanyi, an ICT consultant with Makueni Distributors is in the process of developing a Management Information System (MIS) for the Company. Currently, she is designing sales database using three tables namely: - customers, products and transactions. The details for each table are given below:-

Customers	Products	Transactions
Customer ID	ProductID	TransID
CustomerName	ProductDescription	ClientName
PostalAddress	Packaging	TransacDate
Town	UnitPrice	Product
Phone	Stock	Quantity

Questions

(a) Create a database named MIS and in it create three relations
(b) Identify the most appropriate field as the primary key in each table
(c) Establish relationships among the three tables and enforce the referential integrity
(d) Create a form for each table. Save the forms as **Customer Form, Product Form and Transaction Form**
(e) Use the respective forms to enter the following records in each table

CUSTOMERS TABLE

CustomerID	Customer Name	Postal Address	Town	Phone
H001	Andrew Mwove	209	Mutituni	200870
H002	Erick Onsongo	68	Nyamira	248567
H003	Brenda Nyabuti	100	Bomet	789678
H004	Lydiah Winzaa	250	Mwingi	778009
H005	Jeff Ogero	330	Keroka	666790
H006	Maureen Makuthu	550	Kakeani	780906

PRODUCTS TABLE

ProductID	Product Description	Packaging	Unit Price	Stock
AA001	Cooking Oil	20 kg Gal	16000	80
AA003	Rice	50Kg Bags	4500	60
AB004	Detergents	5 Litres	11000	40
AC006	Fertilizer	50Kg bags	4700	30
AA007	Mineral Water	1.5 Litres	8200	400

TRANSACTION TABLE

CustomerID	ClientName	TansacDate	Products	Quantity
1001	Andrew Mwove	06/04/2007	Cooking oil	6
1002		26/04/2007	Mineral water	8
1003	Erick Onsongo	23/04/2007	Detergents	10
1004	Maureen Makuthu	14/04/2007	Cooking oil	12
1005		02/05/2007	Rice	4
1006		08/05/2007	Fertilizer	3
1007	Erick Onsongo	16/05/2007	Detergents	25

(f) Create a query that displays the customer Name, Product Description, Quantity, Unit price and a calculated field total payable by each customer. Save the query as MISQuery

(g) Generate a report from MISQuery. Save the report as MISReport

(h) Print the Customers, Products, Transaction table' s design, MISQuery and MISReport

QUESTION 2

Using **DTP** software design the publication based on the following instructions to appear as it is

1) Set the page to have portrait orientation and margins to be as follows;
   (a) Format the heading: **BISELEX BUSINESS**" to bear the following features:-
   (b) Font type: Copperplate Gothic
   (c) Font size: 26
   (d) Background color: grey
   (f) Alignment: centered
2) Format the heading " **New Arrivals for new generations'** to bear the following features:-
   (a) Font type : Monotype corsiva
   (b) Font size: 22
   (c) Alignment: Centered
   (d) Border style: 6pt
   (e) Rotate it appropriately
3) Format the heading " **All Under One Roof**" to bear the following features:-
   (a) Underline style: words only
   (b) Font type: Arial Narrow
   (c) Font size: 20
   (d) Alignment: centered
   (e) Rotate it appropriately
4) Format the text below the heading " **Motto : Customer Satisfaction**" to be in three columns and format it as follows:-

1st column

i) Drop cap the first character to four lines

ii) Line spacing 1.25pt

2nd column

i) Underline the title **" Items**" with a broken line
ii) Text weight: bold italics
iii) Bullet the listed items appropriately

3rd column

5) Insert the rounded rectangle and format its heading to :
(i) Underline : Double
(ii) Font type: Arial Black
6) Format the text under the heading " **LOCATION**" as follows:-
(i) Font type: Castellar
(ii) Font size: 9pts
7) Insert the suitable picture as it appears in the publication
8) Insert the header to bear **Your Name** and the Footer to bear **Your Index Number**

YOUR NAME

BISELEX BUSINESS

NEW ARRIVALS FOR NEW GENERATIONS

ALL UNDER ONE ROOF

100% OFFER

MOTTO: CUSTOMER SATISFACTION

Biselex Business is a pioneer enterprise which is specializing in house hold goods and furniture at affordable rates to our clients.

ITEMS

- Coffee Tables
- Microwaves
- Fridges
- Pressure cookers
- Ovens
- Cutleries

LOCATION

WE ARE LOCATED AT WESTLAND ARCADE PLAZA NEXT TO SAFARICOM HOUSE



For more Information contact us on:

Tel: 0722345678/0734789678
Email : biselex@gmail.co.ke

Welcome all

YOUR INDEX NUMBER

MAT

Question 1

(a) Wafula is a secretary for all clubs in the school. He has been told to create Club_DBMS id database management system (DBMS) to help the club maintain record on the clubs' members.

Relation name	Fields	Primary key
Student	Admission Number	Admission number
	First Name	
	Last Name	
	Form	
	Stream	
Club_Details	Club Number	Club Number
	Club Name	
	Date established	
Membership	Registration Number	Registration Number
	Club Number	
	Admission Number	
	Date of registration	
	Membership fee	

(a) Perform the following operations just like Wafula would:

(i) Create a database Club_DBMS with the tables shown above. (12mks)

(ii) Index on last name on the able student (2mks)

(iii) Crate a lookup list for the following fields in class student (3mks)

Field	Lookup list
Form	One
	Two
	Three
	Four

Field	Lookup list
Class	East
	North
	West
	South

(iv) Create One-Many relationship between the relations and enforce referential integrity (3mks)

(b) Create use friendly screen inputs with the Add New Record, Find Record, Delete Record and Close Screen Input commands for each of the table, save them using respective table's name (12mks)

(c) Using the input screens, enter the records below: (6mks)

Admn. No.	First Name	Last Name	Form	Stream
3200	Busaule	Mwitani	Two	East
3811	Mawi	Martha	One	South
2844	Nambwaya	Nancy	Four	East
2910	Wafula	Victor	Four	Central
3295	Hassan	Eunice	Three	East
2956	Busolo	Josephat	Three	North
2977	Makhanu	Josephat	Four	South
3216	Mateshe	Jackline	Three	West

Club Number	Club Name	Date established
97/Mat	Mathematics	05/02/1997
02/Sci	Science	08/04/2002
01/Env	Environment	01/09/2001
97/Lan	Debate	08/04/1997

Reg. Number	Admn. No.	Club No.	Reg. Date	Membership Fee
MT/0013	2844	97/Mat	12/03/2007	100
SC/0189	2977	02/Sci	11/03/2007	120
MT/0975	2910	97/Mat	05/05/2007	100
DB/0111	2977	97/Lan	11/03/2007	90
EN/1001	3811	01/Env	01/03/2010	80
SC/0998	3216	02/Sci	09/10/2008	120
SC/1006	2844	02/Sci	12/03/2007	120
DB/0565	3295	97/Lan	10/05/2008	90

(c) Create a query for each record containing the product of membership fees $ multiplied by 79.8. Label this column " Amount in shillings" . The query should display: Last Name (in ascending order),
First Name, Registration Number, Date of Registration, Amount in shillings. For all members whosel last name start with M or J and first name start with M save the query as **Query M** (8mks)

(d) Create a query that Display Admission Number, Last name, first Name, Club Names and Registration date for form four students. Save query as **Members** (3mks)

(e) Create a tabular report from Query-M that displays Last Name, First Name, Membership Number, Date of Registration, Membership Fees paid in shillings and display the total to the membership fees at the end of the report. Save the repo\rt as " **Membership Report**" (5mks)

Admn. No.	First Name	Last Name	Form	Stream
3200	Busaule	Mwitani	Two	East
3811	Mawi	Martha	One	South
2844	Nambwaya	Nancy	Four	East
2910	Wafula	Victor	Four	Central
3295	Hassan	Eunice	Three	East
2956	Busolo	Josephat	Three	North
2977	Makhanu	Josephat	Four	South
3216	Mateshe	Jackline	Three	West

(f) Create a tabular report from Members query, sort the records by first name and save it as **Club Members.** (4mks)

(g) On each report, add your name, index number and page number in the format " Page X of Y pages" as footer (4mks)

(h) Add " Mary Seat of Wisdom Bulimbo Girls' Sec. School" and Report Name as Header on each report (2mks)

(i) Print membership Report, Club Members, Query-M and Student table (4mks)

Question two

(a) Enter the following as it is onto worksheet and save it as the budget (7mks)

A	B	C	D	E	F	G
No.	**Item description**	**Quantity bought**	**Unit price**	**Amount**	**Comments**	**Cost Rank**
1	2Kg Mumias Sugar	4	210			
2	Sony 2HD floppy	3	37			
3	Rapid spring file	10	56			
4	200pg A4 books	9	89			
5	1 litre Quencher	2	256			
6	AIHAO Gelink pen	15	55			
7	Omega dustless chalk	18	105			
8	LG 2GB Flash Disk	4	1055			
	Total					

(b) Rename worksheet 1 as Budget and Worksheet 2 as My Graph (3mks)

(c) Insert two rows above labels in the budget 1 worksheet. Enter in the first row, a Word Art " A sample Budget: Back to Business." (4mks)
(d) Enter cell B2 and C2, VAT and 18% respectively (1mk)
(e) Calculate ;
(i) Using name referencing calculate the amount for each item (amount = quantity *price) (4mks)
(ii) Total quantity, price and amount using formulae (3mks)
(iii) Display " Thank for shopping" for amount above 500, " Almost in a draw" for amount between 250 and 499, otherwise " Buy More" (4mks)
(f) Using column **E**, rank the items with the most costly ranked as the last (4mks)
(g) Format all values on the worksheet to two decimal places aligned right of cell and in pounds (£) (3mks)
(h) Copy the information on Budget1 worksheet to workshet3. Rename corksheet3 as copied(2mk
(i) Save the workbook as Budget2 (1mk)
(j) Change respective quantities of items on budget 1 worksheet (1mk)

Sony 2HD floppy	18
200pg A4 books	12

(k) Using item name and taxes on Budget1 worksheet, create a line chart of item description and amount on worksheet My Graph (8mks)
(l) Save the workbook as Final Budget and print the chart (2mks)

MUM

WORD PROCESSOR

1. (a) Type the following passage exactly as it appears into a word-processor, spell check and format it accordingly. Use typeface Times New Romans, font size 12.
Format your document to fit exactly on one page. Save it as A: NET 1 (26marks)

NETWORKS MODELS

Networks can be organized into three basic models client/server, peer to peer and centralize computing. Client/Server and peer-to-peer are used with PC networks. While centralized computing models are used with mid-range and mainframe computers usually running a UNIX-based operating system. The peer-to-peer model is the simplest to implement and assemble. Client/server is the most popular configuration, because of its versatility and power drawing mainly from the vast variety and higher performance of specialized server hardware.

Central computing networks

The host is the core of the centralized computing model. Host computers typically run the UNIX operating system and can process multiple jobs simultaneously and in a very efficient manner. Jobs are initiated by the Terminal, which has no processing capability on its own and simply provides input/output for the host. The user logs into the host computer to process the user' s job; when the job is finished, the host computer sends the results of the job back to the terminal.

The main advantage of centralized computing is that they are the highest performance networks today. Its major disadvantages are:

- They are costly
- They are dependent on custom written software
- They are more complicated than PC severs

Client/Server Networks

The client/server network is the workhorse of the network world and consists of at least one server with shared recourses and one or more clients which users do their work on. The server, often called the back end, stores and secures users' files. It provides the single point of administration for network users, files, and applications. In a client/server network, the function of the server is to provide services, where as the function of the client is to provide the actual processing. Most client/server networks are built round a domain structure, where all servers within a given domain share a common administration scheme.

Peer-to-peer Networks

A peer-to-peer network is simply a group of computers that function as both servers and clients (share and access resources). In this type of network, a user works on a workstation and actually shares that workstation' s resources with other workstations.

Disadvantages

- It may be slow
- Lack of a central security administration
- Decentralized administration might be a nightmare.

(b) (i) Bold face and italicize all the occurrences of the words client/server
(ii) Justify and set the left and right indents of the second paragraph at 1 inch.
(ii) Save the document as **A**: **NET 2** (6mks)

(c) (i) Copy **NET 1** passage to a new document
(ii) Present the document into two columns with a line between the columns. Introduce a column break on the sub heading " Client/Server Networks" so that your second column begins exactly with that header.
(iii) Save the new document as **A**:**NET 3** (6mks)

(d) (i) Introduce double space in the last paragraph of **NET 2**
(ii) Search and replace the word " host" with " main" in the whole passage.
(iii) Save the document as **A:NET 4** (6mks)

(e) (i) Animate the title of the passage of document **NI-T4** to have a blinking background.
(ii) Convert the paper orientation to landscape and format your document to fit on one page.
(iii) Save the passage as **A: NET5** (5mks)

(f) Print2. A stationery store keeps a record of all items sold in the store. The details are given in table 3 table 3 below.

Item code	Description	Quantity	Supplier
005	HBI pencils (doz)	200	Shah
001	Stapler	100	Shah
009	Photocopy paper (reams)	200	Chania
007	Staples (packets)	300	Vipingo
010	120 pages (ex. Books)	200	Vipingo
006	Spring files	200	Shah
002	Diskettes	300	Chania
003	HB2 pencils (doz)	500	Shah
008	Foolscaps (reams)	300	Vipingo
004	Chalk	350	chania

(a) Create a database structure containing the fields:
Item code
Description
Quantity
Supplier

(b) Enter the records as shown in table 3 into your database and save it as Stat 1. (l2mks)
(c) Modify Stat 1 to include the field for date received and save as Stat 2. (3mks)
(d) Items with cods 001, 007, 009 and 010 were received on 10/05/200 1. Items with codes 002, 005, and 008 were received on 12/05/2001 and the rest were received on 15/05/2001. Enter this information on the date received field. (5mks)
(e) Sort Stat 2 on item code field in descending order and save it as Stat3. (6mks)
(f) Create a query to extract all items delivered by Shah on 15/05/200 1 and save as query 1.

(g) Using Stat 1, generate a tabular report titled " Stationery store items" and containing the following fields in the order shown.

Supplier **Description** **Quantity**

Save the report as report 1

Print Stat1, Stat3, query 1 and report1 (8mks)

TNW

Q1. (a) Type the passage below as it appears using a word processing package and save it as A:\Bono1. (Settings: Font Arial, font size 12 for all text, margins; top 0.5" , bottom 0.6" , left 1" , right 0.5" , 1st Heading Size 20, 2nd & 3rd Size 14). 36mks

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 H_2o, talked to a couple of journalists and left.

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?***

b) i. Copy the paragraph that begins with " He has personally……" to page 2. (1mk)

ii. Set the paragraph to hanging indent. (1mk)

iii. Change the line spacing of the entire paragraph to double and convert it to landscape.(4mks)

c). Insert your name and index number as the header left aligned. (1mk)

d). Carry out word count on the document and write on the paper provided the number of:

- Words
- Characters (with spaces)
- Characters (no spaces) (3mks)

e). Paginate the document using page x of y at the top center. (2mks)

f). Save the entire document as A:\Bono2 (1mk)

g). Print document A:\Bono2. (1mk)

Q2. The information in the following two tables relates to a vehicle buying and selling business.

Table 1: Seller details

Seller No	Seller Name	Address	Town
8215	Samcon	23454	Nakuru
8242	CMC	654	Eldoret
8430	DCM motors	3554	Nairobi
8620	Farmers Garage	7645	Kitale
8845	KCI	8643	Kisumu

Table 2: Vehicle details

Reg No	Make	Type	Price	Seller No
KAJ 543Q	Nissan	Matatu	1,200,000	8242
KAQ 952R	Mercedes	Saloon	4,000,000	8242
KAX 534S	Peugeot	Pickup	960,400	8620
KAZ 454C	Mazda	Saloon	550,000	8215
KBA 386A	Toyota	Pickup	750,000	8620
KBB 917A	Toyota	Saloon	800,000	8430
KBE 875T	Isuzu	Lorry	1,800,650	8430
KBG 805G	Scania	Bus	10,500,000	8845
KBJ 324D	Isuzu	Bus	9,200,000	8845
KZL 931	Toyota	Matatu	1,400,000	8620

a). Create a database file named A:\Business. (2mks)

b). Create the two tables above and save them using their respective names. Determine the appropriate primary keys. (10mks)

c). Create a form based on each table. Insert form titles as seller details form and vehicle details form respectively. (5mks)

d). Use the forms to enter the records in the two tables as shown above. 15mks)

e). Create a query containing the following fields(Reg no, Make, price and Seller name). It. Should display only those vehicles whose prices are above 1000,000. Save as Sales1. (6mks)

f). Remove the criteria set in sales1 query. Include a calculated field in the sales query to derive new prices if the current prices went up by 5%. Save as sales2. (5mks)

g). Create a tabular report based on sales2 query. The report should show the total amount collected from selling the vehicles if they were sold at their new prices. Save as report. (4mks)

h) Print the seller details table, vehicle details table and the report. (3mks)

KKC

QUESTION 1

(a) Type the following letter as it appears in a word processor. Use the mail merge feature to produce copies of the same letter to the persons whose details are given below:- (12 mks)

MWANGAZA HIGH SCHOOL
P.O. BOX 4800
ELDORET
8TH JULY, 2010

<NAME≥ <ADMNO≥
<ADDRESS>
<TOWN>
Dear <Name>

RE: 2009 KCSE RESULTS

I AM Happy to inform you that NOKDEC Examinations are out. Kindly arrange to visit our school on <<Date to visit > at 9.00 a.m. In order to know the details. Remember to carry your original K.C.P.E certificate and Examination register card bearing the index number.

Yours truly,

Headteacher

Data source (List of candidates)

Name	Adm. No.	Address	Town	Date of visit
Mark Otieno	8071	P.O Box 24	Sondu	10/08/2010
Kevin Kirui	8089	P.O. Box 172	Kericho	11/08/2010
Benard Soi	8065	P.O. Box 84	Bomet	24/08/2010

Required:-

i) **Save** main document as Main Doc (1 mk)
ii) **Save** data source as Data source (1 m)
iii) Change addresses and reference font size to 14 points. (1 ½ mk)
iv) **Underline** the reference. (½ mk)
v) **Merge** the letter onto main document so as to produce copies for all the candidates and save it as Results 2009 (6 mks)
vi) **Print** the letter, main Doc, Data source, Results 2009 (3 mks)

b) Type the following text in a word processing software. (22 mks)

INTRODUCTION TO COMPUTERS & OPERATING SYSTEMS.

A computer is a machine or an electronic device that can solve problems by accepting data, performing certain operations on that data (processing) and presenting the results of those operations (information)

Basic characteristics that distinguish a computer from other information processing devices:-

(i) A computer is electronic – That is, all its processing operations are carried out with electrical signal.
(ii) A computer can store information for future reference. This is done on temporary basis with memory circuits and permanently with storage devices such as magnetic

disks and tape.

(iii) Computer is programmable – unlike other devices built to perform a single function, a computer can be instructed or programmed to perform a variety of tasks.

HOW A COMPUTER WORKS.

Connecting the data (raw facts) into information (organized, usable form) is called data processing. Data get into system by means of an input device e.g. keyboard then the computer performs the necessary calculations or manipulations on the data and finally the organized information is displayed by an output device e.g. a monitor.

FUNCTIONS PERFORMED BY A COMPUTER.

Although computers have many applications, they can perform only three basic tasks

(i) Arithmetic functions on numeric data (Adding, subtracting, multiplying and dividing).

(ii) Test relationship between data items (by comparing values).

(iii) Store and retrieve data.

These skills are really no more than people can do, but the computer can accomplish the task more;

- Faster
- Accurately
- Reliably

Required:-

(a) Align the title to the centre and underline it. (1 mk)

(b) Add boarder to the title. (2 mks)

(c) Replace all the Roman Numbers with bullets. (2 mks)

(d) (i) Insert the footer " Computer Assessment Test 2010." (1 mk)

(ii) Insert the header " Your Name and the Index No." (1 mk)

(e) Set the spacing to exactly 1.5 (4 mks)

f) Insert Word Art " COMPUTER" and set it to appear behind the text. (5 mks)

(g) Search for words " computer" and replace all with " PC." (2 mks)

(h) Move paragraph with heading " How a computer operates" to the end of the document.

(i) Set the front style of the document to Aerial black. (3 mks)

(j) Save your work as " computer literacy." (1 mk)

(k) Print your document. (2 mks)

2. (a) Create a new workbook and name it as form 4 computer exams. (1 mk)

NAME	CLASS	Adm No.	CAT 1	CAT 2	CAT 3	TOTAL	AVERAGE	CLASS POSITION	REMARKS
Maina Joan	E	7984	80	70	59				
Ken Korir	W	7896	75	55	72				
Benard K.	E	8092	86	59	75				
John Soi	E	7460	80	79	70				
Kipsang Bett	W	7892	76	75	80				
Mitei E.	E	7800	38	48	25				
Mark J.	W	8490	37	51	29				
Koech Ben	W	8184	30	86	75				

James W.	E	8082	25	27	20				
Abuya Ken	E	8083	30	25	25				
Leonard B.	W	8047	39	24	25				

(b) **Enter** the following data in sheet 1. (20 mks)
(c) **Rename** the sheet as Term One Results. (1 mk)
(d) Find:
(i) Totals (2 mks)
(ii) Average (2 mks)
(e) Use IF function to award remarks as follow:
- A student whose average is above or equals to 65 gets " Excellent."
- An average of 55 or above but less than 65 gets " Average."
- An average of less than 55 award " Below Average."

(f) (i) Award positions to students basing on the average score. (3 mks)
(ii) On the last rows enter formulas to count students from both classes. (2 mks)
(g) **Sort** the student list by class position in ascending order. (2 mks)
(h) (i) **Insert** a bar graph to display the information below:-
- The three CATS
- Names
- Title as " TERM ONE COMPUTER RESULTS"

ii) Place the legend at the bottom of the graph. (1 mk)
iii) **Save** the chart on a new sheet and name it graphical analysis. (1 mk)
(i) **Print:**
i) The filtered lower group. (1 mk)
ii) The chart. (1 mk)
iii) Term one results sheet. (1 mk)

UGU

1. (a) Using a word processing package, type the passage below as it appears and save it as **A:/STRESSDOC1** (27mks)

1

A parent who appreciates by saying, " Well done' or I' m proud of you' can leave an indelible mark.

There is much more to facing stress in life than the right diet and physical exercises. Indeed, it could be that the attitude on which your life is founded is the most vital part of the picture.

Take charge of your life

Keeping stress at bay involves treating yourself as someone with a right to life. That will involve a degree of assertiveness and confrontation. Those very words can conjure up images of a shoot-out at the OK Corral. It does not have to be that way. There is a world of difference between being assertive and being aggressive. Sadly, many who need to break out from being always submissive to the expectation and demands of others can only imagine that the alternative is to be aggressive.

You are submissive when:

- you are not willing or not able to express your feelings, needs, values and personal concerns
- you let others invade personal space and trample on your rights.

You are aggressive when:

- you tend to stomp over other people

- you inflict and impose your views and values on others, expressing your feelings at their expense.

You are assertive when:

- you say what you want, without overwhelming or abusing other people
- you are clear about your own position and let other people know
- you can accept that others may have views different from your own and may wish to negotiate their position accordingly.

Assertiveness involves much more than defending your rights. It equally concerns your being prepared to expect that your own needs be recognized and met. In particular, two key statements typify the maturity of character that lies behind assertive. These are the conviction that:

(a) *I have the right to decide for myself whether or not I am responsible for finding a solution to someone else' s problem and they have the same right when faced with mine.*

(b) *I have the right to deal with people without having to make them like me and they have the same right concerning* me.

Few people find that assertiveness comes easily. But the hard work involved in monitoring your personal style together with some training through a local evening class or appropriate reading pays dividends. This is because mastering assertiveness leads to:

- better and more honest communication
- giving others greater dignity and respect
- learning to relax and reduce anxiety
- getting more of your needs accepted
- closer interpersonal relationships
- taking responsibility of what happens in your life
- feeling better about yourself
- protection from being taken advantage of by others

(b) (i) Spell check the passage (2mks)

(ii) Indent the first line of the paragraph starting with " Keeping stress at bay…." (2mks)
By 1.2cm (or 0.47")

(iii) Select the paragraph starting with " Assertiveness involves much more…." and set the left and the right margins to 2cm (or 0.79") and fully justify. Save the changes as A:/STRESSDOC2. (6mks)

(iv) Insert page numbering at the bottom center of each page (2mks)

(c) (i) Retrieve A:/STRESSDOC1 and covert all the text from the paragraph starting with " There is much more…" " into two columns of the same width and height. (5mks)

(ii) Change the line spacing for the entire paragraph starting with " There is more to facing stress…" to 1.5.
(2mks)

(iii) Save the changes as A:/STRESSDOC3 (1mk)

(d) Print the documents; A:\STRESSDOC2 A:\STRESSDOC3 (3mks)

2. Use the information in the table below to design a database. Name the table as " EmpT and store the database file as Company (20mks)

Name	**Date of birth**	**Sex**	**ID No.**	**Dept**	**Salary paid (Kshs.)**
Peter	20-07-71	Male	1377841	Accounts	3000
James	30-5-78	Male	1235542	Sales	4000

Gregory	30-06-79	Male	1244745	Account s	5600
Job	14-04-77	Male	2213540	Marketing	4500
Sarah	14-07-79	Female	1124681	Sales	3000
Paul	12-04-80	Male	1455367	Accounts	3500
Onyango	25-04-08	Male	0147535	Sales	7000
Jessica	01-01-79	Male	5664124	Sales	3500

(a) Create a form named EmpF and add two more records using the form (5mks)
(b) Create three reports to print the information below:
(i) Employees listed by Department types (EmpR1) (6mks)
(ii) Alphabetical listings of all employees (EmpR2)
(iii) All employees in the sales department get a 2% commission on sales. Create a report to show the commission paid to all the sales people, if the basic salary for the sales people is Kshs.3000 (EmpR3) (8mks)
(c) Create a query (EmpQ) to show who will be retiring at the end of the year, if the retirement age is 55.

KSM

1. You are an accountant in affirm that provides mobile phone services. You wish to work out the pay details for a new employee and present a report.

NAME	YEARS WORKED	BASIC PAY	DEPARTMENT	SALES (KSH)	HOUR OF OVERTIME	MILEAGE (KM)
Eric	9	14000	sales	16000	10	120000
Stephen	23	18000	admin	25000	11	130000
Fred	5	7000	sales	22000	12	112000
John	17	18000	marketing	12000	15	134200
Julius	18	16000	sales	11000	22	123000
Daniel	3	25000	admin	30000	12	10200
Martin	11	19000	sales	35000	33	132000
Stanley	15	15000	marketing	14000	14	112000
Evans	11	23000	admin	25000	0	12000
Gideon	8	17000	accounts	14000	7	154000

(a) Using the information above, design an appropriate spreadsheet and enter the given data, give it a suitable title and save it as A: Tel 1 (14mks)
(b) (i)calculate the total sales and total mileage and labels them accordingly (4mks)
(ii) Write on the paper provided the formula used for total mileage (1mk)
(iii) Save the spreadsheet now as A: Tel 2 (1mk)
(c) (i) The employees sales commission is calculated as 11% of the employees sales. Input this commission rat in cell C20 and label it appropriately. (3mks)
(ii) Insert a new column labeled ‘ sales commission’ between ‘ sales’ and ‘ hours of overtime’
(iii) Create a formula to give the amount f sales commission by making reference to sales commission cell. (4mks)
(iv) On the paper provided write the formula created. (1mk)
(v) Copy the formula to get the sales commission for all the other employees and save the worksheet as A: Tel 3 (3mks)
(d) (i)staff who work in admin and work overtime are given a bonus of shs.3600 but no overtime pay, while staff who work in other departments are paid overtime pay at a rate of shs.200 per hour. Create a new labeled ‘ overtime and use a function to fill the value into the column appropriately. (6mks)
(ii) On the paper provided write the function you have used (2mks)

(iii) Save the spreadsheet now as A: Tel 4(1mk)

(e) (i) Create a column for the sales/mileage ratio and label it ' sales/mileage' . Use a function to calculate the ratio and copy it down the column to fill the value for all employees.

(ii) Use the IF function to put the remarks ' GOOD' in a new labeled REMARK for only these employees whose sales/mileage ratio is greater than 2 (4mks)

(iii) Save the spreadsheet now as A: Tel 5 (1mk)

(iv) Print files Tel 1, .Tel 2, Tel 3, and Tel4and Tel 5 (2mks)

2. Compulynx is a company with numerous branches in east Africa. in order to monitor the performance of the branches and that of the cities in which the branches are located, a database to organize the information is required:-

(a) Create a database file and name it company (2mks)

(b) (i) create a table containing the following fields (4mks)

Field name	Field type
STORE-NO	Number/numeric
BRANCH	Text/character
CITY	Text/character
STAFF-SIZE	Number/numeric

(ii) Make the field STORE-NO the primary key and save the tables as STORES. (2mks)

(c) (i) Create a form from the STORE able and save it as STORE-FORM (5mks)

(ii) Use the form to enter the records below (5mks)

STORE-NO	BRANCH	CITY	STAFF SIZE
I	Tudor	Mombasa	15
2	Bongo	Dar-es-salam	14
3	Sunset	Nairobi	21
4	lake view	Kampala	15
5	king' orani	Mombasa	9
6	Beach town	kisumu	16
7	ABC	Nairobi	89
8	crane Ltd	kampala	7
9	wheat land	nakuru	12
10	ocean view	Dar-es-salam	6

(d) (i) Modify the Store table to include and additional field with the heading SALES(SHS) (3mks)

(ii) Enter the information below for each of the stores (2mks)

STORES-NO	SALES
1	789,300
2	685,400
3	376,958
4	355,420
5	457,800
6	682,458
7	541,000
8	235,420
9	352,415
10	433,443

(iii) In the STORES table, swap the fields CITY with BRANCH (2mks)

(e) (i) Create a query from the STORE tales to display the field BRANCH,CITY,STAFF-SIZE and SALES(SHS) for stores whose sales are less than 400,00 (3mks)

(ii) Sort the records in the query above in alphabetical order of BRANCH field and save it as POOR PERFORMERS (2mks)

(f) (i) create a tabular report with landscape orientation from STORE tables to display the field in the following order

STORE-NO BRANCH SALES (SHS) 4mks)

(ii) Sort records in the report in alphabetic order of the BRANCH field (1mk)

(iii) Compute the total sales and place it below the SALES (shs) column and change its font size to 13 (5mks)

(iv)Place two straight lines cutting across the page, one above and one below the sales total

(g) (i) Insert a header COMPULYNX PERFOEMANCE in the report having font size 19 and centre it across the page (3mks)

(ii) Remove the report pagination and insert your name and index number in its place and save the report as PERFORMANCE (2mks)

(h) Print STORES table, POOR PERFORMER query and performance report

KKE

1 a) Create anew workbook and name it as form 2 computer exams (1mk)

Name	class	Adm.No:	CAT1	CAT2	CAT3	total	average	Class position	Remark
Maina john	E	7984	80	70	59				
Ken Korir	W	7896	75	55	72				
Bernard K	E	8092	86	59	75				
John Soi	E	7460	80	79	70				
Kipsang Bett	W	7892	76	75	80				
Mitei E	E	7800	38	48	25				
Mark J	W	8490	37	51	29				
Koech Ben	W	8184	30	86	75				
James W	E	8082	25	27	20				
Abuya ken	E	8083	30	25	25				
Leonard	W	8047	39	24	25				

b) Enter the following data in sheet 1 (15mks)

c) Rename the sheet as term one result (1mk)

d) Find:

i)totals

ii) Average (2mks)

e) Use the subtotals function to find the average of each class (5mks)

f) Use the IF function to award marks as follows

- A student whose average is above or equal 65 is given " excellent"
- An average of 55 or above but less than 65 award " average work"
- An average less than 55 award " work below average"

i) Award position to students basing on the average scored (3mks)

ii) On the last rows, enter formulas to count students from both classes (2mks)

g) Sort the student list by class position in ascending order (2mks)

h) i)copy the entire worksheet onto sheet 2 and rename it " lower group" (2mks)

ii)filter " lower group" sheet to display students from " E" class and whose average score is below 50

i) Draw a bar graph to display the following information (3mks)
-the three cats
-names
-Title as " TERM ONE COMPUTER RESULTS"

i) Place the legend at the bottom of the graph (1mk)

ii) Save the chart on a new sheet and name it graphical analysis (1mk)

j) Print

i) The filtered lower group (1mk)

ii) The chart (1mk)

iii) Term one results sheet (1mk)

2 a) Create a database called ELIMU (2mks)
b) Create three tables EXAMINATION, DOS and BOARDING with the field as shown below
c) Create a relationship between the three tables and enforce integrity (6mks)
d) Enter the data items in the given three tables (15mks)

	EXAMINATIONS			
Admission number	mathematics	English	Kiswahili	Biology
1	45	67	90	23
10	45	89	90	20
2	45	70	80	45
3	89	90	90	20
4	78	9	90	50
5	67	89	60	90
6	67	90	7	80
7	34	78	70	90
8	23	50	38	90
9	23	15	67	20

		DOS		
Admission number	S name	Other names	KCPE Mark	Year of KCPE
1	Peter	Barasa	327	2007
10	Johnson	Suk	250	2001
2	Alex	Ojwang'	340	1998
3	Chepkuto	Esther	250	2008
4	Wekesa	Raymond	450	2007
5	Alex	Wamwana	410	2003
6	Jane	Kilonzo	400	2000
7	Mathew	Kariuki	450	1999
8	Nasimiyu	Catheen	290	2003
9	Kimathi	John	300	2001

	BOARDING		
Admission number	uniform	tool	Tool name
1	No	12	JEMBE
10	Yes	20	JEMBE
2	No	11	PANGA
3	Yes	1	SLASHER
4	Yes	111	JEMBER
5	No	15	RAKE
6	Yes	22	BASIN
7	Yes	11	BROOMS
8	Yes	90	RAKE

9	yes	23	BUCKET

e) Design query that would display the following fields as shown below and write down the formulae for getting the total score and criteria for extracting the records below (10marks)

	Admin						
Admission number	uniform	S Name	KCPE Mark	maths	English	Kiswahili	TOTAL SCORE
1	Yes	chepkuto	250	89	90	90	269
10	Yes	wekesa	450	78	9	90	177
2	Yes	Jane	400	67	90	7	164

f) Design a report that would sort the following in ascending order of the following fields, total score, and KCPE score, name the admission number and the report should display all the fields. Save the report as administration (5mks)
g) Print, administration and admin (2mks)

RCH
Question 1.
Ms – Access Database
(a) Create a database file called **VIDEOS** and use it to enter the details that follow. (3 mks)
(b) Create a table called Customer using the following structure. (4 mks)

Field Name	Data type	Size	Description	Caption
Customer ID	Number	3	3 – digit unique number	Customer ID
Last Name	Text	25	Enter the Last Name	Last Name
First Name	Text	15	Enter First Name	First Name
Address	Text	50	Address	Address
Birth Date	data/time		Enter yyyy/mm/dd	Date of birth
Home Tel	Text	14	Home Tel.	Home Tel.
Work Tel	Text	14	Work Tel.	Work Tel.
Email	Text	40	Email Address	Email Address
Gender Place	Text	1	M or F	Gender
Work Place	Text	40	Place of employment	Place of employment

(i) Make the Customer ID Field the primary key. (1 mk)
(ii) Format the Last Name and First Name fields to convert characters to upper case by using >.
(iii) Enter Yes in the required property of the Last Name, First Name and Gender fields. (1 mk)
(iv) Format the Birth Date field yyyy.mm.dd to input the birth dates ,year, month abd day.(1 mk)
(v) Use the input mask for the Home Telephone and work Telephone fields. The input mask should be (999) 999 – 999.
(vi) Format the Gender field to convert the character to upper case using >. (1 mk)
(vii) Enter the M or F for the Validation rule field of the gender Field. (1 mk)
(viii) Enter the Only **valid entries are M or F in the validation Text** of the Gender Field.(1 mk)

(ix) Enter Yes in the required property of the gender field. (1 mk)

(x) Save the tables as Customer. (1 mk)

Customer ID	Last Name	First Name	Address	Birth Date	Home Tel.	Work Tel.	Email	Gender	Work place
201	JOHNSON	MICHELE	RUBY PARK, ST PHILIP	1969/02/15	(245) 431-2916	(246)_ 2196	Michele@bclub.com	F	Bankers Night Club
202	CHANDLER	TRYONE	BANK HALL, ST. MICHAEL	1969/03/05	(246) 431-8971	(246) 422-1119		M	GE Electronics
203	BANFIELD	SHIRLEY	71 LONG BAY DEVELOPMENT	1970/10/26	(246) 5441		sheba@email.com	F	
204	ISIDORE	EYSTHER	4MT STANDFAST, ST. JAMES	1968/11/10	(246) 433 – 9172	(246) 422 – 1999		F	Queen Elizabeth Hospital
205	CONNEL	WINSTON	CANE GARDEN, ST. THOMAS	1971/12/10	(246) 433 – 9172	(246) 417-4177	connel@hotmail.com	M	Transport Board
206	KELLMAN	ARLENE	ST. PATRIICKS, CHRIST CHURCH	1974/06/10	(246) 421 – 2031	(246) 426 – 2979	sypher@hotmail.com	F	KMGP
207	PAYNE	REBA	FOSTER, HALL, ST. GEORGE	1967/01/03	(246) 423-6823	(246) 423 – 9741	rebapay@sunbeach.com	F	Core Crystal Hotel
208	GRANT	FREDERIC H	GRAPEHALL, ST. LUCY	1962/09/09	(246) 417 – 2280			M	
209	SMITH	IRENE	ASHTON HALL, ST. PETER	1945/07/07	(246) 433-3302		storm@hotmail.com	F	
210	THOMAS	WICKMAN N	BOSCOBELLE, ST. ANDREW	1943/04/06	(246) 429 – 2916	(246) 422 – 1231		M	JG Retirement home
211	CATWE	PAULIN	BRAGGS	1970/02/	(246) 433 –		catpur@yaho.	F	Caribbean

	LL	E	HILL, ST. JOSEPH	02	87 91		com		Union
212	GREAVES	LINDA	TOHMPSON ROAD, ST. THOMAS	1970/09/10	(246) 417 - 4177	(246) 417-4177		F	Shoppers Retail Store

c) Enter the following data into the customer table. (10 mks)

(d) Save the table as Customer.

(e) Some new data become available and a few changes have to be made to existing table. These tasks are listed below.

(i) Enter the new address for Shirley Banfields as 7 Bayfield Development. (1 mk)

(ii) Delete record 12.

(f) Index in ascending order the customer table on the last name and first name fields in the design view. The index is called Name. (5 mks)

(g) Perform a select query and print the last name, first name, address, home and work telephone numbers for each customer. He would like the information printed with the last names in alphabetical order. Save the query as Customer List. (5 mks)

(h) (i) Create a query to display all customers who live in St. Michael or St. Thomas. Save the query as Saint. (2 mks)

(ii) Display all customers whose last names begin with " B' save it as B. (2 mks)

(i) Create a Customer data entry form from the customer table. The title of the form should be " Customer Data Entry Form" (4 mks)

(j) Print customer table, Customer List, Saint and B. (2 mks)

Question 2.
Spreadsheet Microsoft Excel

You are employed as a sales clerk at JOY TO THE WORLD Mobile Shopping Center. Make a Spreadsheet, which keeps track of 2001 Xmas Orders. Enter the data below, using a format of $ and 2 decimal places for the Cost.

	A	**B**	**C**	**D**	**E**
1	CLIENT #	ORDER 1	ORDER 2	ORDER 3	COST
2	A-039	393	567	452	59.00
3	M-539	239	189	102	41.00
4	A-725	257	200		35.00
5	R-341	775	348	183	53.00
6	M-910	158	358	455	89.90
7	P-394	981	208		47.25
8	M-032	319	186	128	38.75
9	M-333	456	235	185	62.00

(a) Type the following data in a spreadsheet program and save it as SHOPPING. (5 mks)
(b) Calculate the NET ORDER (i.e. the total number of orders for each client). (3 mks)
(c) Calculate the SUBTOTAL for each client. (3 mks)

(d) Sale tax is 6%. Handling cost is $8.00. Write them in appropriate cells in the spreadsheet.(2 Calculate the TAX AND HANDLING charge foe each client. (5 mks)
(Subtotal* sales tax) + handling cost.
(f) Calculate the TOTAL CHARGE for each. (5 mks)
(g) Format ALL results from the above calculations as $ and zero decimal places. (3 mks)
(h) Show the lowest, highest and average figures for each order. (5 mks)

(i) Center, underline the name of the company at the top of the spreadsheet. (2 mks)
(j) Save the spreadsheet as ORDERS 1. (1 mk)
(k) Change the sales tax to 7% handling charges to $9.50 and the cost for client # M-910 to $45.78.
(l) Delete the record of client # P-394. (2 mks)
(m) Sort the records so that the client numbers appear in descending order. (3 mks)
(n) Save as ORDERS 2. (1 mk)
(o) To the right of $9.95, enter the alternative handling charge as $11.95. (1 mk)
(p) Using ORDERS 2 to analyze the sales of order 1 only, delete the columns for ORDERS2, ORDERS S3 and the NET ORDER. Recalculate the SUB-TOTAL for each client. (5 mks)
(q) Using ORDERS 2. If a customer buys 319 items or less, the handling charge will be $ 9.95. If the order is 320 or more then the handling will be $ 11.95.
Recalculate the TAX and the HANDLING charge for each customer where TAX AND HANDLING = (Subtotal* sales tax) + handling cost.
Enter the new formula in the TAX AND HANDLING column. (3 mks)

(r) Make a bar graph in a new sheet called COMPARISON which shows the total charge for each client. The graph should also reflect how much of this is tax and handling and show how much is subtotal. (2 mks)
(s) Save it and print all the files. (2 mks)

TZM
QUESTION ONE (50 MARKS)
A), using an appropriate word processing, type the following passage and save it in diskette as **DATA SECURITY** (l0marks)

Data security and control
External threats
i. Fire, floods, earthquakes and other natural disasters. These are the potential threats hut are not the most common external problems,
ii. Theft of equipment-theft of pc's laser printers and even memorychjps after a **Break into a building are very** common,
iii. Espionage (intelligence)-information in the wrong hands can do a lot of damage. Example access to a payroll or accounting information is restricted so Such information should be shielded away from external and internal spies.

Internal threats
Internal threat would include
i. Hacking
ii. Fraud
iii. Hardware failure
iv. Corruption of databases

Viruses load and run without the user requesting them to run; and cause considerable damage e.g.
i. Modifying other program
ii. Hiding inside other programs with an aim of spreading to other mashine
iii. Destroying data and programs.

It is a computer code which usually designed to carry out two tasks:

i. To replicate itself from one computer system to another.

ii. To locate itself within a computer system in such a way as to make it possible for it to amend or destroy programs and data files, by interfering with the normal processes of the operating, system.

Questions

i) Copy the original document (data security) to the next page (2marks)

ii) Format the headings as follows: (6marks)

	Font size	Font type	underline	bold
Data security and control	14	Times new Roman	Yes	Yes
External threats	14	Monotype corsiva	None	Yes
Internal threats	14	Default	Yes	No

iii) Change the numbering to bullets; as follows: (2 marks)

Headings	bullet
i. External threats ii. internal	> •

iv) Strike through the word internal threats (2marks)

C). i) **Insert** the ANY clipart at the bottom center of the document. (3marks)

ii).**Create** word art as indicated by the symbol. (2marks)



iii) Using auto shape, design a logo as indicated by the symbol. (2marks)



D) Save the document as **SECURITY** (2marks)

E)i. Copy the original document (data security) to the next page (2marks)

ii. Drop cap the first letter of the document (D) to cover two lines (1mark)

iii. Spell check the whole document. (2marks)

iv. Double space and italics the first paragraph (3marks)

v. Insert a header "computer threat" to appear in every page (2marks)

vi. Number the pages using the format 1, 2, 3.....

F) Save the document as **COMPUTER THREAT** (2marks)

G) Print the document

i. Data security (1mark)

ii. Security (1mark)

iii. Computer threat (1mark)

QUESTION TWO (50 marks)

The following is a worksheet extracted from business Join venders.. They have come together to do a business of selling computer accessories.

Names	Cost	Sales	Gross profit	Expenditure	Reserves	Net profit	Remarks
Benson	700	350		450			
Betwel	400	700		50			
Kimwat	200	900		200			
Amos	300	1000		300			
Tembur	100	500		100			
Korir	400	600		40			
Towett	600	850		55			
Maritim	500	350		70			
Kerich	200	350		45			
Bency	500	1000		40			
Danson	600	900		170			
Kones	900	1000		20			
Koech	100	800		130			

Additional Information.

a) Gross profit = Sales-Cost

b) Net profit = gross profit - (expenditure+ reserves)

c) Reserves = 10% gross profit

d) Remarks are: "very good vendor", "good vendor", "domain vendor"," burden vendor". "Quite vendor".

REQUIREMENT

(i) Create the workbook and enter the details, save as vendor.ex (15marks)

(ii) a) Keep the title of the workbook to be JOIN VENDORS and format it to be bold, font size 14 and a align at 20° (4marks)

b) Format the figures in sale column to 2 decimal places (2marks)

c) Insert two rows between Tembur and Korir and enter the records below: (5marks)

- Name Bii, cost 100, sales 500 and expenditure 10.
- Name Mutai, cost 800, sales 2000 and expenditure 80.

(iii) Use sum function to calculate gross profit for each member (3marks)

(iv) Use product function to calculate reserves for each member (3marks)

(v) Use "IF function" and net profit to analyses the vendors, taking the following remarks: (6marks)

a) If net profit >=500, then "very good vendor"

b) If net profit > 400, then " good vendor"

c) If net profit <=300, then" domain vendor"

(vi) a) Use names of the vendor and cost to insert a line graph, keep the title of the graph to be PRODUCTIVE ANALYSIS, format it and place it in a separate sheet. (5marks)

b) Save the changes as productive analysis (2marks)

c) Print the **"Join vendor"** and **"productive analysis"** including gridlines 4marks)

QUESTION 3 (50 MARKS)

3. You have been asked by the school administration to design school advert to inform school members about form four farewell party. Your advert should look like the design below.

1mk

'an investment of knowledge pays

The following KASNEB notes are available;

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