

**451/1  
COMPUTER STUDIES  
THEORY PAPER  
JULY/AUGUST 2007  
TIME 2 ½ HOURS**

**KISUMU DISTRICT JOINT EVALUATION TEST  
Kenya Certificate Of Secondary Education (KCSE) 2007**

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COMPUTER STUDIES  
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**MARKING SCHEMES**

1. Different sizes and shapes of screw drivers
  - Anti- static wrist member
  - Pliers with narrow nose
  - Manufacture's manual for motherboard and other components
2. Hubs – devices used to link several computers together, multiport repeaters  
NIC – Enable each computer on the network to be connected to the network cable.
3. (i)  $00100001_2$   
(ii)  $10000_2$
- 4 (a)
  - Keying e.g. Keyboard
  - Scanning e.g. Barcode reader, OMR, OCR
  - Voice recognition
  - Pointing device

(b) -**Portability** – whether a program can be copied or installed in more than one computer -  
program can be used in another computer with little or on change.  
- **Compatibility** – refers to the ability of the computer to run the software depending on the  
system setup (configuration.)
5. -Ensure that the room has enough ventilation points like windows  
- Ensure you've installed an air conditioning system  
-Avoid overcrowding of either machines or people in the room.
6. **Section break**  
-To divide document into sections then format each section the way you want.  
**Page break**  
-Force a page at a specific location on a page you insert manual page break  
-For word processor to start a new page
7. (a) - Petroleum refineries
  - Chemical plants
  - Manufacturing
  - Vehicle assembly

(b) -Third generation languages  
4GL'S –Speed up the application building process  
-Enable quick and easy amendments and alterations  
-More users' oriented, non procedural  
-fewer commands  
3GL'S- Procedural languages

8.
  - Biometric analysis
  - Video cameras
  - Biometric scanner
  - CCTV cameras
  - Traffic laws – traffic lights
9.
  - (a)
  - (b) Language translator that translates programs in H.L.L. statement by statement.
10.
  - Engineering design work
  - Architectural drawings
11.
  - Teletext** – computerized service whereby news and other information are provided on TV screens to subscribers TV screens are configured using special add-on card or adapter.
  - Video text (view data)**
  - View data in a two way communication service half duplex over a telephone line or cable television channel.
  - Subscribers can interact with the service provider database read information displayed on a home TV screen.
12.
  - (a)
    - Speed of the processor
    - CPU clock
    - The processor
  - (b) SERIAL
  - USB
13.
  - Mails
    - ❖ Checking
    - ❖ Compose
    - ❖ Forwarding
    - ❖ Sending
    - ❖ Saving
  - Fax
  - File attachment
  - On –line meetings
  - Telephone messages
  - Contact management
14.
  - Establish a web site
  - Emails
  - On-line meetings

-FAQ

-Video conferencing

15. B5 = Average (B2, B3, B4)

B6 = MAX (B2, B3, B4)

B7 = MIN (B2, B3, B4)

16. (a) -Test data

-Disk checking (Dry me)

-Using debugging utilities

(b) -Javascript

- UBScript

- PHP

-HTML

-XML

(c) Set total per student to 0

Set total for all students to 0

Input name, hours

Repeat

Set total per student = change x hours

Set total for all students = total for all students + total per students

Until hrs is less than zero

Print hrs, total per student, total for all students.

**NB** –*Termination can be with name or any preformed variable.*

Q17. (a) Software License

- This is whereby the software manufacture give the software user authority to use software
- User signs a contract in which you agree not to make copies of the software to give away on the resale
- You buy only the companies permission to use the software and not the software itself.

(b) **Public domain software**

- Not protected by copyright law

- Have been donated to the public by the creators

**Freeware**

-Available free of charge

-Freeware developer often retain all rights to their programs

**Shareware**

Copyrighted software that is distributed free of charge.

(c) **User oriented doc**

-Enable user to learn how to use the program as quickly as possible with little help.

**Operator Oriented**

-Meant for computer operations such as technical stuff.

**Programmer oriented doc**

-Provides necessary technical info to help in future modification of the program.

## (d) - Booting the computer

- Perform operations such as retrenching, loading, executing and storing application programs.

- Storing and retrieving files.

- Perform a variety of system utility functions.

## 18. (a) (i) Absolute reference

- Cell reference that will remain fixed even if the formula containing the reference is moved.

## (ii) Relative- Instructs spreadsheet to treat cells used

-Allows a formula to be moved to a new location on a worksheet

-Formula will then follow the same directional instructions from the new starting pointing using new cell references

## (iii) Label

-Text on No's that describe the dash you place in rows and columns

-Entered to define rows and columns

Value he No's formula and functions that spreadsheets users to perform calculations.

## (b)(i) – Misspelt words

- Incorrectly spelt words

- Flags poor grammar

- In complete sentences

-Awkward phrases

-Excessive use of the passive voice

- Wordiness

## (ii) Data recovery

-Used to restore data that has been physically damaged or corrupted

Data Compression

-Remove redundant elements, gaps and unnecessary data from a computer's storage space so that former bits are required to store or transmit data.

(c) (i) Between 1000 and 0

(ii) Like J \*

(iii) =sum ([QTR1])

=sum ([QTR2])

=sum ([QTR3])

19. (a) An interrupt is a break from the normal sequential processing of instructions in a program.

(b) Layering - Placing text or objects on top of each other

Tracking – Changing usual denseness or openness of characters in a line.

(c) (ii) Output specification

Input specification

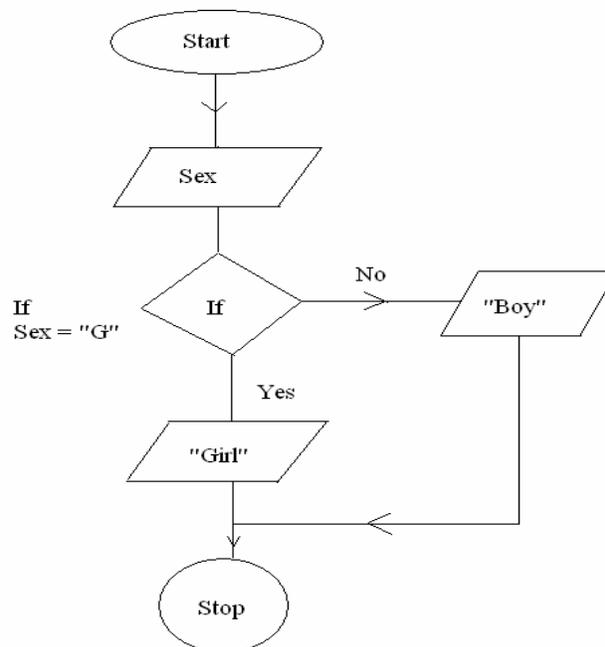
File/ data stores

Hardware and software requirement

(d) (i) Dot matrix

(ii) Laser/inkjet

(iii) Plotter



(e) (i) -Provides first hand information which may not be on the set questions.

-Able to observe most current information

-Information is obtained instantly

-Information remains in the memory of the research /analyst for along time.

## 20. (a) Tracks

Rings on a diskette along which data is recorded

## Sectors

Invisible wedge shaped sections used by the computer for storage reference purposes

## Formatting

Preparing diskettes so that OS can write information on them

## Write-Protect features

(b) (i) -Start a bureau services

-Consultancy services

-Publishing houses to typeset books, newspapers and magazines.

(ii) -Whether it offers ICT courses recognized both locally and internationally

-The cost of training with such an institution.

(c) (i) Allows fast /speed in stock trading

(ii) On- line processing

(d)

⇒ Indexed sequential