

Name: Index no

School: Candidate's sign

Date:

451/1
COMPUTER STUDIES
PAPER 1
(THEORY)
TIME 2 ½ HOURS.

Kenya Certificate of Secondary Education (K.C.S.E.)

Computer Studies
Paper 1

INSTRUCTIONS TO CANDIDATES

- Write your name and index number in the spaces provided above
- This paper consists of **Two** sections **A** and **B**.
- Answer **ALL** questions in section **A**.
- Answer question 16 and any other **THREE** questions from section **B**.
- All answers should be written in the spaces provided on the question paper.

FOR OFFICIAL USE ONLY

SECTION	QUESTIONS	QUESTION'S ACTUAL SCORE	CANDIDATES SCORE
A	1-15		
B	16		
	17		
	18		
	19		
	20		
	TOTAL SCORE		

This paper consists of 8 printed pages. Candidates should check the question paper to ensure that all pages are printed as indicated and no questions are missing

SECTION A (40 MARKS)

1. Distinguish between logical and physical files. (2mks)
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.....
2. State **three** ways in which computers can be used in (1½ mks)
(a) Financial institution.
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(b) Transport system (1½ mks)
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3. List **four** techniques of using a mouse. (2mks)
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4. (a) What is virtual reality? (1 mk)
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(b) State **four** components of sensory devices used in virtual reality. (2mks)
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- 5 (a) Explain **two** advantages of using universal serial bus. (2mks)
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(b) Explain **one** reason why parallel cables are faster than serial cables in data transmission. (2mks)
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6. (a) Describe **two** differences between metropolitan area network and wide area network (2mks)
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(b) List any **three** components of local area network. (1mk)
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7. State **two** peripheral devices connected to a computer via PS/2 (1 mk)

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8. List any **two** careers available in the market in the computer hardware. (2mks)

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9. A computer teacher wants to minimize illegal entry of people to a computer laboratory.
Explain **three** measures in which to have to put in place in order to curb this illegal entry. (3mks)

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10. (a) State **four** keyboard keys that work in a state of On/Off switches in operation. (2mks)

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(b) Describe **two** precautions one need to undertake when connecting a hard disk to a computer. (2mks)

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11. (a) Give **two** reasons why its' difficult to detect and prevent a computer crime (2mks)

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(b) State the differences between autocorrect and auto complete as used in word processing. (2mks)

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12. (a) Define the term

i) Search engine (1mk)

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ii) System entropy (1mk)

(b) Give an example of search engine. (½ mk)

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13. (a) What is real time? (1 mk)

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(b) Explain how real time differs from distributed processing mode. (2mks)

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14. (a) Describe **three** disadvantages of using monolithic program. (3mks)

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(b) Explain the uses of the following in desktop publishing.

i) Master page (1mk)

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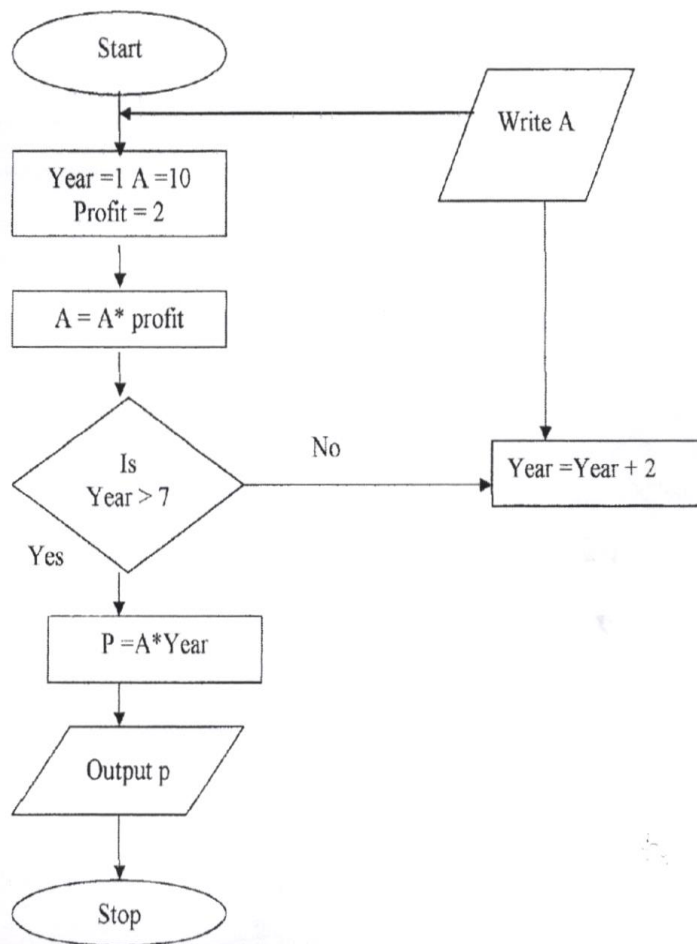
ii) Tracking (1mk)

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SECTION B (60MARKS)

Answer question 15 and any other three questions

15. Study the flowchart below and answer the question that follow



- (a) List the various outputs from the flowchart above. Show your working. (5mks)

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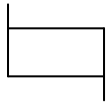
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(b) Write a pseudo code for the flowchart. (6mks)

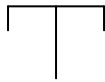
(c) State **two** advantages and disadvantages of high level languages. (4mks)

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16. You are provided with two types of DTP tools



(R)



(Q)

a) Identify tool.

i) R (1mk)

ii) Q..... (1mk)

(b) State **three** methods of transforming an object. (1½mks)

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(c) Perform the following binary operation in decimal notation.

i) $10111.111 + 111.011$ (3mks)

ii) $1111.01 - 111.11$ (3mks)

(d) Explain any **two** ways in which you can tell that a computer has been invaded by virus. (2mks)

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(e) Describe the steps to follow in order to

i) Attach a file to an E-mail (2mks)

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ii) Check E-mail from internet (1 ½mks)

17. (a) (i) What is expert system?

(1 mk)

(ii) Explain **three** components of expert system?

(3mks)

iii) State the value that will be displayed in E2.

(1 mk)

(b) Describe the impact of information communication technology in

(i) Environment

(2mks)

(ii) Employment

(3mks)

(c) (i) Define disk partitions

(1mk)

(ii) Explain **two** reasons that may lead to a partition of a hard disk

(2mks)

(d) A work sheet contains the data shown below

Cell	B1	B2	C2	D2	E2
Entry	65	70	80	35	=sum if (b ₁ :b ₂ " >35")

i) Give the formula that can be used to obtain product of B2 and D2.

(1mk)

ii) State cell data type that represent cell B1

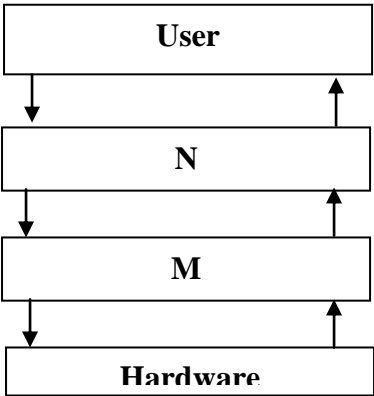
(1mk)

(a) (i) Explain **three** components of satellite

(6mks)

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-
- (ii) State **two** advantages of 18 a(i) above media (2mks)
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- (iii) List **three** examples of radio waves signals (3mks)
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- (c) Explain **two** reasons why optical cables have become best choice for local area network. (4mks)
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19. The diagram below represents the role of operating system in a computer system. Use it to answer the questions that follow. (2mks)



- (a) Name the part labeled tie
- i) M..... (1 mk)
- ii) N..... (1 mk)
- (b) Explain **two** advantages of using program N in commercial organization. (4mks)
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- (c)Classify three types of program M (3mks)
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- d) State **three** situations that may lead to use of questionnaire than interviews. (3mks)
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(e) Explain the purpose of the following files

(i) Backups (1mk)

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(ii) Reference (1mk)

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(f) State **two** types of database relationships. (1 mk)