

Name..... Index No.....
 School..... Candidate's Sign.....
 Date.....

451/1
COMPUTER STUDIES
Paper 1
(THEORY)
July/august 2010
2 ½ hours

BORABU – MASABA NORTH DISTRICTS JOINT EVALUATION TEST – 2010
Kenya Certificate of Secondary Education (K.C.S.E)

COMPUTER STUDIES
Paper 1
(THEORY)
2 ½ hours

INSTRUCTIONS TO CANDIDATES

- Write your name and index number in the spaces provided
- This paper consists of two sections A and B
- Answer all questions in section A
- Answer question 15 and any other three questions from section B
- All answers should be written in the spaces provided on the question paper.

For examiner's use only.

Section	Question	Candidate's score
A	1-14	
B	15	
	16	
	17	
	18	
	19	
Total score		

This paper consists of 12 printed pages. Candidates should check the question paper carefully to ascertain that all the pages are printed as indicated and that 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
(a) Financial institution (1½ mk)

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(b) Transport system (1½ mk)

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3. List four techniques of using a mouse. (2mks)

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4. (a) What is virtual reality? (1mk)

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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. (1½ mks)

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7. State two peripheral devices connected to a computer via PS/2 port (1mk)

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8. List any two careers available in the market in the field of 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 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 it's difficult to detect and prevent a computer crime (2mks)

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(b) State the difference 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)

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

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

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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

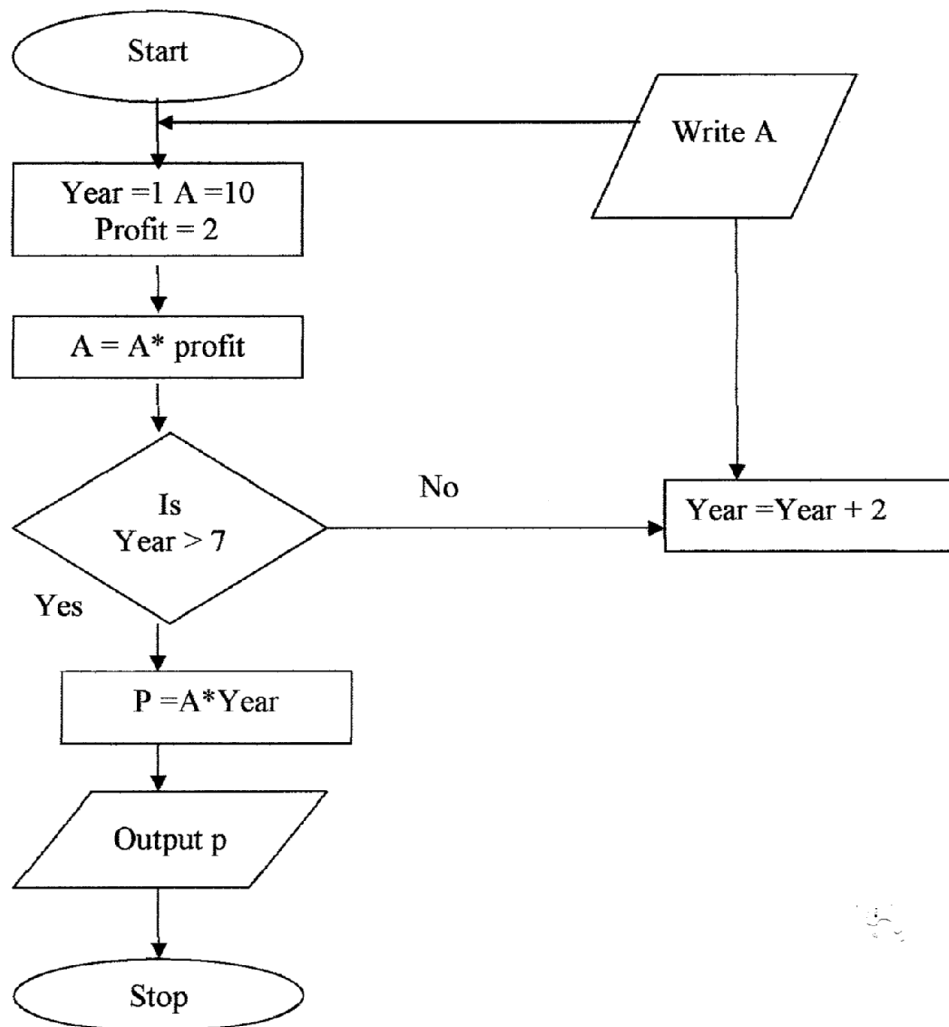
(1mk)

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SECTION B (60MKS)

Answer question 15 and any other three questions from this section in the spaces provided.

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



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

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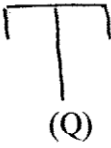
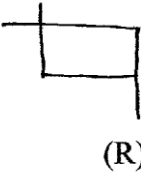
(b) Write a pseudo code for the flowchart. (6mks)

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

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16. You are provided with two types of desktop publishing tools



a) Identify tool
i) R- (1mk)

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ii) Q- (1mk)

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(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 an E-mail from internet.

(1 ½ mks)

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

(1mk)

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(ii) Explain three components of expert system

(3mks)

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(b) Describe the impact of information communication technology in

(i) Environment

(2mks)

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(ii) Employment

(3mks)

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(c) (i) Define disk partitions

(1mk)

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

(2mks)

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(d) A worksheet 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 B 1. (1mk)

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iii) State the value that will be displayed in E2. (1mk)

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18. (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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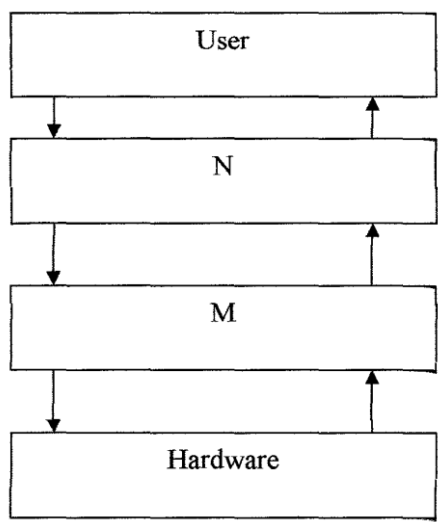
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19. The diagram below represents the role of operating system in a computer system. Use it to answer the questions that follow. (2mks)



(a) Name the part labeled

i) M-

(1mk)

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ii) N

(1mk)

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(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 (1mk)

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