

Name.....Adm No.....Class.....C/NO.....

451/1

Computer Studies

Paper 1

(THEORY)

FORM FOUR

CAT 1 TERM 1 2019

2 hours



FOCUS A365



A M A N Y A M F R A N C I S E . C O M P R O D U C T I O N

Computer Studies

Paper 1

(THEORY)

2 hours

INSTRUCTIONS TO CANDIDATES

Write your name and Adm no number in the spaces provided above.

This paper consists of TWO sections; A and B.

Answer ALL the 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	Question	Candidates Score
A	1-15	
B	16	
	17	
	18	
	19	
	20	
TOTAL SCORE		

This paper consists of 11 printed pages

SECTION A- Answer all the questions in this section

1. What is a computer drive? (1 Mark)

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2. Mr. Osanoa computer technician in one of the schools used speech method to store students oral answers to an exam into a computer

a) What is a speech input? (1 Mark)

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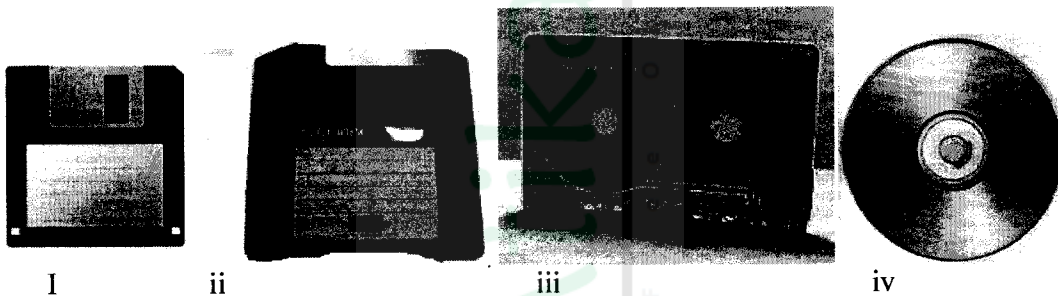
b) State one advantage and one disadvantage of using this kind of input. (2 Marks)

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3. In reference to ALU, explain the meaning of logic operations and give an example of this processing operation. (2Marks)

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4. a) Identify the four types of storage media shown below (2Marks)



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b) Compare the storage device (i) and (iii) above (1Mark)

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5. a) Define the term hub (1 mks)

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b) State three characteristics of a hub (2Marks)

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6. a) Outline the three program control structures (1½Marks)

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12. i) A student at Sunshine secondary school was working with a computer using the windows operating system. After sometime he started experiencing the following problems.
- The computer failing to load the Operating system during the booting process
 - The computer hangs now and then
 - Abnormal restarting
 - Display a blue screen with the message such as fatal exception error has occurred.

What could be the cause of the above problems?

(2Marks)

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- ii) A student was advised by the teacher to buy integrated software over separate software. What do you think could be the advantages of this?

(2Marks)

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13. a) What is a deadlock?

(1Mark)

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- b) Explain the term plug and play

(1Mark)

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- c) Differentiate between a program file and a data file

(1Mark)

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14. i) State two factors you would consider when designing a file

(1Mark)

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- ii) List down three factors you need to consider during file conversion

(3Marks)

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15. State two limitations of language processing

(2Marks)

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SECTION B (60 marks)

Answer question 16 and any other **three** questions from this section in the spaces provided.

16. (a) State the importance of the following in programming

(i) Assembler (1mk)

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.....

(ii) Compiler (1mk)

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.....

(b) A form four class sat for an exam in eight subjects. A student must get an average of 50% in all subjects in order to pass. A report is required that will show the name, marks obtained by each student per subject, the average mark and whether the student has passed or failed.

(i) Write a pseudocode used to solve this problem. (6mks)

(ii) Draw a flow chart for this report. (7mks)

Atika School

FREE ONLINE ACADEMY



17. (a)(i) State any THREE standard coding schemes used in computing and electronic systems.

(1½marks)

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.....
.....

(ii) Convert 312_{10} using any TWO of the above mentioned coding schemes.

(2 marks)

(iii) Using TWO's compliment, perform the following arithmetic leaving your answer in binary form

(2marks)

$$10_{10} - 13_{10}$$

(iii) Use one's compliment to solve the following sum: $-18_{10} + 12_{10}$

(2 ½ marks)

(b) (i) Explain the difference between a bridge and a router with an example of each (3marks)

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(ii) What is the use of a modem

(1 mark)

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.....

(iii) What do the following abbreviations stand for as used in wireless communication devices?

(3 marks)

i. PCMCIA.....

ii. WLAN.....

iii. AP.....

18. (a) Differentiate between the following as used in word processing

(6marks)

(i) An **indent** and a **tab stop**

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(ii) **Margins and gutter**

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(iii) **Footnotes and Endnotes**

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(b) A History teacher directed all students to present their work in double space format. Outline the procedure for double spacing a document. (3marks)

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(c) Owili, a form Four student, formatted a document to four columns. Explain how this was achieved in word processing (3marks)

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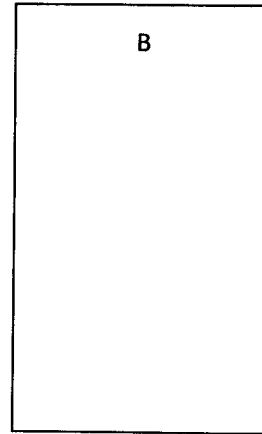
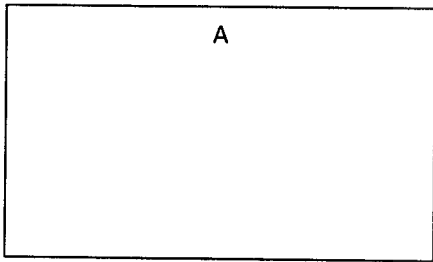
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(d) Ndwiga printed documents with paper layout as shown below.



(i) Identify the layouts. (1mark)

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(ii) Explain when each layout should be applied (2marks)

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19. (a) Computer students visited KASSUJET TV station in the city and noticed that the News presenter in the studio was communicating in real time with other four reporters through a web cam and a microphone connected to a notebook PC nearby. The live images of the other reporters were projected on a white board mounted in the studio.

(i) Describe this type of communication. (2 marks)

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(ii) State any TWO advantages and ONE disadvantage of this type of communication. (2 marks)

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(b) Currently there is a shift in technology towards digital from analog. State any THREE advantages of digital technology over analog technology. (3 marks)

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(c) (i) Documentation is usually not considered as a programming stage. Why is this so? (2 marks)

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(ii) Differentiate between internal and external documentation. (2 marks)

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(ii) State THREE types of documentation that are available at the end of the programming project. (3 marks)

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20. Martina Lotino went to the supermarket and bought the items shown in the picture of the spreadsheet given below:

	A	B	C	D	E
1					
2					
3	Description	Unit Price	Quantity	Sub Total	
4	milk	45	5		
5	bread loafs	65	3		
6	cereal	100	2		
7	cheese	80	3		
8					
9			Total Price		
10					
11			Cash		
12			Return		

(a.) (i) What is the name of the **active sheet**? (1 mark)

.....

(ii) By looking at the above picture, give the **reference of an active cell**. (1 mark)

.....

(iii) What function did the examiner use to **copy** the above picture on this examination paper? (1 mark)

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(b) (i) A cell can contain a formula. **Name** the other **TWO** items which a cell can contain. (2 marks)

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(ii) Now, Julieta , a new employee, has just joined the company and does not know the difference between a formula and a function. You are required to explain this to her in the space provided below. Support your explanation with an example of each. (4 marks)

Formula:.....

Example:.....

Function:.....

Example:

(c) (i) Write the **formulae** that must be typed in the following two cells: **D5, D7** (2 marks)

.....

.....

(ii) Write the function that must be typed in cell **D9**:

(2 marks)

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(iii) The bill total in cell D9 amounts to Ksh.860 Martina has a Ksh.1000 note. Write the formula that calculates the change in **D12**.

(2 marks)

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