

Name..... Adm. No.....

DateStudent's Signature.....

FRIENDS GIANCHERE SECONDARY SCHOOL

FORM 3

451/1

COMPUTER STUDIES

PAPER 1

(THEORY)

MARCH 2023

TIME: 2 ½ HRS

1.(a) Headache, back and neck pain may result from use of computers. Explain **two** ways in which back and neck pain can be minimized. (2mks)

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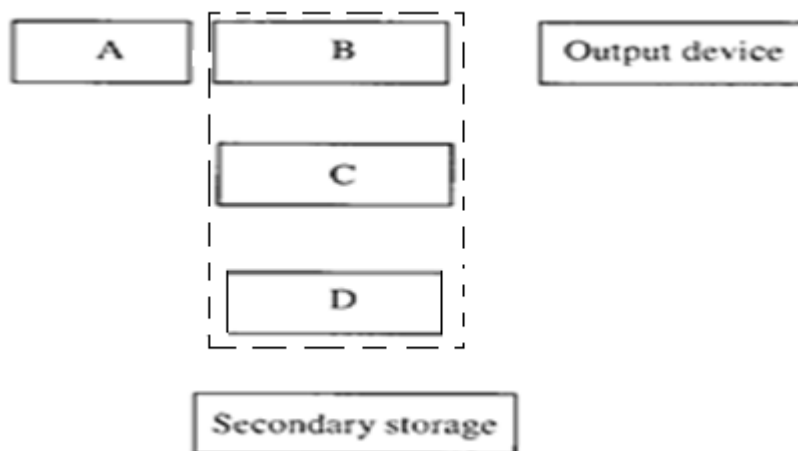
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(b) State how computer have been made more users friendly for persons that are:

(i) Blind..... (½mk)

(ii) Without hands..... (½mk)

2. The diagram below represents the essential features of a computer system. Study the diagram and answer the questions that follow:



(a) (i) Name and describe the following components

(4mks)

A.....

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B.....

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C.....

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D.....

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(ii) On the diagram above, indicate the **direction** of data flow using arrows

(1mks)

3. KASSU High School intends to purchase new computer to be used by students in the e-learning room for accessing digital learning resources and personal research. Advise the school on **two** computer hardware system specification features to consider as a measure of enhancing performance of the computers.

(2mk)

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4. Describe the following terms as used in Microsoft Word.

(1mks)

(a) Text wrapping

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(b) Column breaks

(1mks)

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5.(a) What are the following errors as displayed in a spreadsheet cell

(i) ##### (1mk)

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(ii) ##NUM! (1mk)

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(b) State the importance of the following terminologies as used in SPREADSHEETS.

(i) total function (1 marks)

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(ii) legend (1 marks)

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7. Differentiate between *save and save as*, as used in word processing (2 mks)

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11. Define *overflow error* with respect to computation of data (1mk)

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12. A) (i) What is a **Blog** in relation to internet services (2marks)

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(ii) Explain the impact of the internet in the *information security* (2marks)

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(b) State any **three** features of a word processor

(3marks)

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(c) Differentiate between the following in relation to data security and control

(4 marks)

(i) *Password* and *biometric* authentication.

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(ii) Privacy and Confidentiality.

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(d) Computer crimes include *Trespass*, *Hacking*, *Piracy* and *Sabotage*. Highlight each of them.

(4 marks)

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13. (a)(i) What is the hexadecimal equivalent of 676_8

(2 Marks)

(ii) Use one's compliment to solve the following sum: $-12+25$

(2 Marks)

(iii) Convert 34.175_{10} to its binary equivalent.

(2 Marks)

(b) Using six bits find the two's complement representation of -27_{10}

(5 marks)

(c) Find the difference in the following binary numbers;

(4 marks)

(i) $111011-10001$

(ii) $100011.101-1001.10$

14. (a) (i) Define Data Communication.

(2 marks)

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15. (a) (i) State any **THREE** factors you would consider before installing an operating system. *apart from cost.* (3 marks)

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(ii) Distinguish between *software installation* and *software configuration* in relation to operating system (2 marks)

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(b) Abraham would like to distinguish between *System Tray* and *Task Manager*.

(i) Where are these TWO found? (1 mark)

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(ii) How are they different? (2 marks)

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(c) In relation to operating system, differentiate between;

(i) Kernel and Shell. (2 marks)

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(ii) Process and Page.

(2 marks)

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(d) Mobile Operating System (OS) is software that allows Smart phones, Tablet PCs and other devices to run applications and programs. List any **THREE** examples of Mobile Operating Systems

(3 marks)

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