**NAME ………………………………………………… INDEX NO ………………………………………………………...**

**SCHOOL …………………………………………….....CANDIDATESSIGNATURE………………………………..**

 **DATE……………………………………………….**

451/1

**COMPUTER STUDIES**

PAPER 1

**(THEORY)**

March-2019

TIME: 2 1/2 HOURS

**CHAMPIONS JET EVALUATION TERM ONE 2019**

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

451/1

**COMPUTER STUDIES**

PAPER 1

**(THEORY)**

TIME: 2 1/2 HOURS

**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** the questions in section **A**.
* Answer question **16** and any other **THREE** questions from section **B.**
* All answer should be written in the spaces provided

|  |  |  |
| --- | --- | --- |
| **SECTION** | **QUESTION** | **CANDIDATE’S SCORE** |
| A | 1 - 15 |  |
| B | 16 |  |
| 17 |  |
| 18 |  |
| 19 |  |
| 20 |  |
|  | **TOTAL SCORE** |  |

*This paper consist of 10 printed pages students to confirm the*

*same and ensure there are no questions missing*

**SECTION A; (40 MARKS)**

**Answer all the questions in the spaces provided**

1. Anthony, a student at Kericho Technical College defined a computer as “an electronicdevice which accepts, processes data and produce information depending on its decisions”. Was this student right? Explain you answer. (1Mrk)

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2. Output from the computer can normally be in several forms. Give the difference between Soft copy and Hard copy. (2mks)

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3. Define the term program documentation. (2mks)

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4 . State any **two** types of documentation created in system development. (2mks)

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5. What is data security? (1mk)

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6. Explain any **two** ways in which computers have been made user-friendly for persons that are physically challenged. (4mks)

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7. Explain the meaning of the following terms as used in computer data transmission. (3Mks)

 (a) Simplex transmission

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 (b) Half duplex transmission

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 (c) Full duplex transmission

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. What are the **four** major parts of a Database System? (4 Mks)

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9. Give the difference between machine language and assembly language. (2Mks)

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10. Define the term robot. (1Mrk)

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11. Differentiate between a drive and a device driver. (2Mks)

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12. a. Differentiate between an electronic spreadsheet and the traditional analysis sheet

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 b. Explain how you would change the name of a worksheet in Microsoft Excel. (3Mks)

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13. State **three** reasons why it is important observe safety precautions and practices in a computer laboratory. (3mks)

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14. a. List two examples of Desktop Publishing Software. (1mrk)

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b. Differentiate between Save and Save As as used in most windows applications. (2mks)

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15. Define the following internet related terms. (5 Marks)

 (a) Internet Protocol

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 (b) Search engine

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(c) Browser

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(d) E-learning

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(e) Uniform Resource Locator

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**SECTION B: (60 MARKS)**

***Answer question 16 and any other three questions***

16. a. Define the term control structure. (2mks)

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b. Study the following pseudocode and answer the questions that follow.

Start

N = 0

X = 0

While N < 3

 Repeat

 X = X + 1

 Until X = 2

 N = N + 1

End while

Stop

1. Determine the value of N and X. (5mks)
2. Draw a flowchart of the above pseudocde. (8mks)

17. (a) State any **three** reasons why people may resist the introduction of computers at their place of work. `` (3mks)

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(b) State **two** operational methods of an organizational ensuring the security of data. (2mks)

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(c) Explain the components of an expert system. (6mks)

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d. Explain the role of feed back in a system. (2mks)

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e. List **two** theories of system development. (2mks)

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18 .a Briefly explain the following terms as used in spreadsheet (4mks)

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1. Range\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Value\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Function\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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b. List **three** paragraph formatting features of word processors. (3mks)

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c. Explain the difference between the printing of multiple pages and multiple copies. (2mks)

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d. Distinguish between a worksheet and a work book (2mk)

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e. Explain **four** examples of action query. (4mks)

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19. a. Explain any **three** benefits of using ATMs in banking industry. (6mks)

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b. Explain **two** advantages of advertising on web instead of using an advertising brochure.

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c. Mention any **three** ways of ensuring efficient back up of data. (3mks)

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20. a. Perform the following binary arithmetic.

i. 10111012 + 1001002 - 11111012 (4mks)

ii. 5 $^{6}/\_{8}$ - 8$^{2}/\_{5}$ using ones complement. (4mks)

b. Differentiate between data validation and data verification. (2mks)

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c. List **three** factors that determine the methods of data access in a computer. (3mks)

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d. Give any **two** characteristics of mater file. (2mks)

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