THE KENYA NATIONAL EXAMINATIONS COUNCIL
Kenya Certificate of Secondary Education

451/1 — COMPUTER STUDIES — Paper 1

(THEORY)

Nov. 2019 – 2½ hours

Name ..... **Index Number** .....

Candidate's Signature ..... **Date** .....

Instructions to candidates

(a) *Write your name and index number in the spaces provided above.*
(b) *Sign and write the date of examination in the spaces provided above.*
(c) *This paper consists of **two** sections: **A** and **B**.*
(d) *Answer **all** the questions in **Section A**.*
(e) *Answer question **16** and any other **three** questions from section **B**.*
(f) ***All** answers should be written in the spaces provided on the question paper.*
(g) ***This paper consists of 16 printed pages.***
(h) *Do **not** remove any pages from this booklet.*
(i) ***Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.***
(j) ***Candidates should answer the questions in English.***

For Examiner's Use Only

Section	Question	Maximum Score	Candidate's Score
A	1–15	40	
B	16	15	
		15	
		15	
		15	
		Total Score	

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SECTION A

*Answer **all** the questions in this section in the spaces provided.*

1. State the hardware technological differences between the second generation and the third generation computers. (2 marks)

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2. State **two** ways of ensuring proper ventilation in a computer room. (2 marks)

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3. Convert the decimal number 20.373 to its binary number system equivalent. (3 marks)

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4. Peter has installed internet in his home computer in order to use it for browsing. State **three** ways in which he would prevent viruses from infecting the computer. (3 marks)

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5. State **three** ways of transforming a picture embedded in a Desktop Publishing programme in order to fit in a designated space on a document. (3 marks)

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6. Differentiate between a *line printer* and a *page printer* as used in computers. (2 marks)

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7. Describe *virtual reality* as used in computers. (2 marks)

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8. State the function of each of the following features of an email software:

(a) Inbox (1 mark)

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(b) Draft (1 mark)

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9. (a) Explain the term *toggle key* as used in computer keyboard. (2 marks)

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(b) List examples of toggle keys on a computer keyboard. (2 marks)

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10. State the type of error that would occur in data processing for each of the following cases:

(a) Entering the number 315 instead of 351. (1 mark)

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(b) Entering the text "Kwys" instead of "Keys". (1 mark)

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11. State **four** factors to consider when selecting an input device for use in a computer room. (4 marks)

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12. State **three** functions of Un-interruptible Power Supply (UPS). (3 marks)

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13. Distinguish between a *page break* and a *column break* as used in a word processor. (3 marks)

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14. State **three** factors to consider when selecting an operating system to instal in a computer. (3 marks)

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15. Differentiate between *analogue data* and *digital data* as used in computers. (2 marks)

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