

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	
<b>Total Score</b>			



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

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