

NAME ..... INDEX NO.....

DATE.....

SCHOOL ..... CANDIDATES

SIGNATURE.....

451/1  
COMPUTER STUDIES  
PAPER 1  
(THEORY)  
JULY/AUGUST 2008  
TIME 2 ½ HOURS

# LAICOMET 2010

## Kenya Certificate of Secondary Education

451/1  
COMPUTER STUDIES  
PAPER 1  
JULY /AUGUST 2008

### 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	QUESTIONS	CANDIDATE'S SCORE
A	1-15	
B	16	
	17	
	18	
	19	
	20	
TOTAL SCORE		

### SECTION A (40MARKS)

Answer All questions from this section

1. What is peripheral device? (1mk)

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2. **Highlight** the use of find and replace features in word processors. (2mks)

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3. List **three** factors to be considered when purchasing a microcomputer. (3mks)

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4. Identify **two** proper sitting postures while using computer. (2mks)

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5. Distinguish between **cold booting** and **warm booting**. (2mks)

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6. Computer system are built from three type of physical components: processor , memories and input/output devices

(i) State **two** tasks of processor. (2mks)

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(ii) List any **four** examples of computer output devices. (2mks)

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7. Give **two** advantages of a Digital Versatile Disk over a normal compact disk. (2mks)

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8. State **two** health issues that may result from prolonged use of computers. (2mks)

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9. Describe the role of an operating system in. (4mks)

(i) Memory management.

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(ii) Job scheduling.

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(iii) Error handling.

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(iv) Resource control.

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10. Explain why Two's complement is preferred to one's complement in computing. (1mk)

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11. List **three** factors to be considered when choosing an electronic data processing method. (3mk)

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12. a) List **two** disadvantages of using computers. (2mks)

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b) Give **two** factors that should be considered before enrolling for an ICT course in a college. (2mks)

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13. What is meant by the term *Dry running* as used in program development? (2mks)

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14. Computers have evolved through a number of generations. List any **three** characteristics of the First generation of computers.

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15. A worksheet contains the data as shown below

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>
<b>1</b>	5	10					
<b>2</b>	7	15					
<b>3</b>	10	17					
<b>4</b>							
<b>5</b>							
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<b>8</b>							
<b>9</b>							
<b>10</b>							

a) The formula = COUNTIF (C1:C3, ">10") was entered at G1. Write down the value that was displayed. (1mk)

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b) Write down the formula that would be entered at cell B7 to sum the values in column A whose values are greater or equal to 5. (2mks)

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c) The formula = \$C2 + C\$3 is entered in cell C5 and then copied to D10. Write down the formula as it appears in the destination cell. (2mks)

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**SECTION B (60MARKS)**

**Answer question 16 and any other 2 questions from this section**

16. a) State the **three** basic types of program control structures. (3mks)

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b) Draw a flowchart which will simulate the processing of student’s report. The simulation should be such that the user repeatedly inputs marks per subject for six subjects using a looping control structure. The computer processes the total marks and mean score of the student.

Note. 1. It is assumed that the student does six subjects

2. The output required is; average score and total marks. (7mks)

c) Differentiate between Analogue and Digital data. (2mks)

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d) Outline **three** advantages of using computer for data processing over other types of office and business equipment. (3mks)

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17. a) (i) State the purpose of registers in computer system. (1mk)  
 (ii) Give **two** types of register in a computer system. (2mks)  
 b) Describe the structure of hard disk in reference to cylinders, tracks and sectors. 3mks)  
 c) Highlight **four** factors one should consider when purchasing a printer. (4mks)  
 d) Give **two** advantages of using electronic point-of-sale terminal as opposed to manual entry at a supermarket checkout counter. (2mks)  
 e) A school board of governors intends to put up a computer laboratory. Suggest **three** factors to be considered in accomplishing the above task. (3mks)
18. a) Your school decides to replace its control system. The current system was implemented ten years ago but has restricted reporting facilities and has a text-based interface. The school intends to replace the old system with a new computerized system, and is now considering both 'parallel running' and 'direct changeover'.  
 i) Briefly explain the term parallel running and direct changeover as used in system implementation. (2mks)  
 ii) Give **two** disadvantages of direct changeover over parallel running. (1mk)  
 iii) Identify **two** main risks of direct changeover during system implementation. (2mks)  
 iv) Mention any **two** advantages of running both his manual system and the computerized system simultaneously. (2mks)  
 b) Name the **three** components of a spreadsheet. (3mks)  
 c) (i) What is a Website? (2mrks)  
 (ii) Name three facilities that are needed to connect to the internet. (3mks)
19. A computer user may interact with a computer either through Graphical User Interface. (GUI) or through typed commands.  
 a) (i) State **two** feature of a graphical user interface. (2mks)  
 (ii) Give **two** advantages of using GUI based operating systems over a command line Interface. (2mks)  
 (iii) Some computer systems still use Command line interfaces. State **one** advantage of command line interface. (1mk)  
 b) Explain the use of any **two** buttons found in a spell-check dialog box. (2mks)  
 c) Explain the meaning of each of the following with reference to computer crime. (4mks)  
 i) Tapping  
 ii) Piracy  
 iii) Trespass  
 iv) Fraud  
 d) Explain **four** methods of classifying computers. (4mks)
20. Differentiate between the following terms as used in computer networking. (4mks)  
 i) Modulation and demodulation.  
 ii) Multiplexing and demultiplexing.  
 b) State **four** ways in which the feasibility of a system is assessed. (4mks)  
 c) Explain how the following data security threats can be controlled. (4mks)  
 i) Viruses.  
 ii) Theft.  
 iii) Computer errors and accidental eraser.  
 iv) Unauthorized access.









