

Name.....

Index No...../.....

School.....

Candidates Signature.....

Date

451/1
COMPUTER STUDIES
Paper 1
July/August 2009
2 ½ Hours

**NYAMIRA DISTRICT JOINT SECONDARY SCHOOLS
EVALUATION TEST – 2009**
Kenya Certificate of Secondary Education (K.C.S.E)

451/1
COMPUTER STUDIES
Paper 1
July/August 2009
2 ½ Hours

INSTRUCTIONS TO CANDIDATES

- Write your Name and Index Number in the spaces provided.
- This paper consists of **TWO** sections: **A** and **B**
- Answer **ALL** questions in section **A**
- Answer question 16 and any other **THREE** from section **B**
- All answers should be written in the spaces provided in the question paper

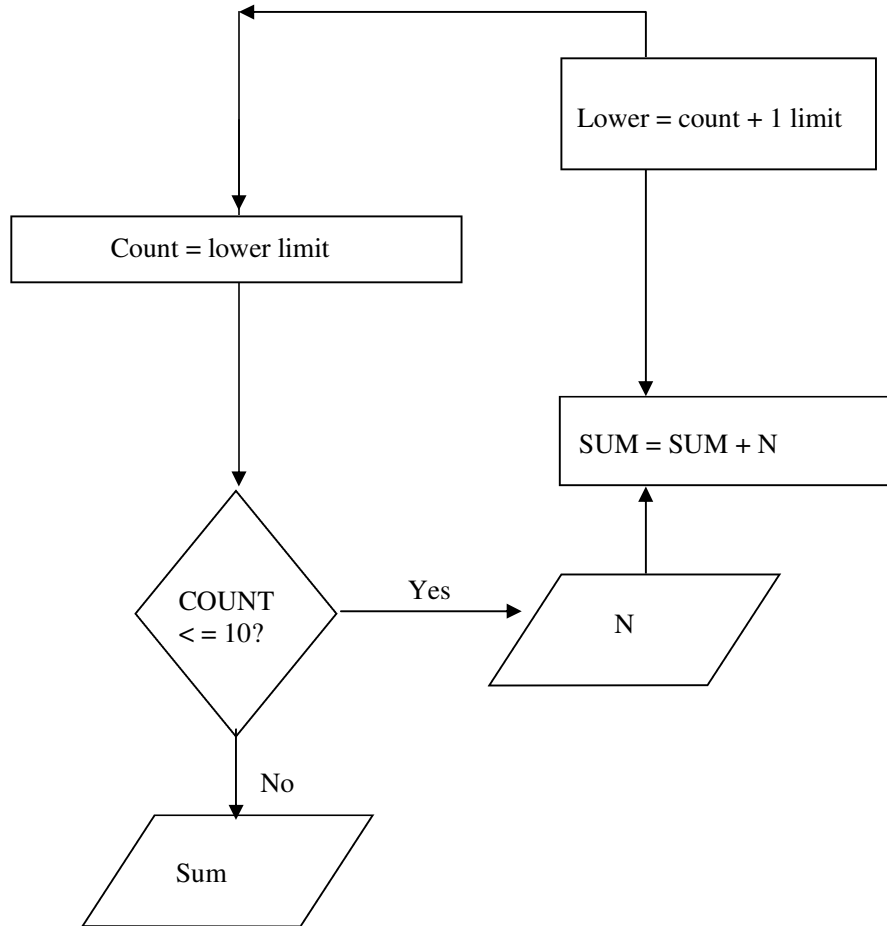
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Section	Question	Candidates Score
A	1 – 15	
B	16	
	17	
	18	
	19	
	20	
Total Score		

*This paper consists of 14 Printed pages.
Candidates should check the question paper to ensure that all the
Papers are printed as indicated and no questions are missing*

SECTION A (40 MARKS)

Answer all the questions in this section.



1. Write a pseudo code for the above flow chart (2 mks)

2. Differentiate between optical and magnetic scanning techniques used for input and give two examples in each case. (2 mks)

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3. Name the three main types of human computer interface. (1½ mks)

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4. Distinguish between a folder and a subfolder. (1mk)

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5. Draw an illustration of a USB port and explain its function. (2mks)

6. Differentiate between parallel and serial port interface cables. (1mk)

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7. a) Explain the following storage disks

i) Zip disks

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ii) Jaz disks (1mk)

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b) Give four examples of optical disks. (2mks)

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8. What do you understand by the following terms: (1¹/₂mks)

i) Industrial espionage

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ii) Eaves dropping

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iii) Surveillance

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9. a) Explain the following terms: (1 mk)

i) surf/browse

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ii) Hyperlink

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b) Explain two functions performed by the UPS (1mk)

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10. a) List three data processing methods. (1/2 mks)

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b) Define the term internet. (1mk)

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c) List four services offered by internet. (2mks)

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11. a) State three communication methods without cables. (1½mk)

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b) Differentiate between fourth generation languages and third generation languages. (1mk)

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12. a) Using twos compliment work out $15_{10} - 8_{10}$ (2mks)

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b) Define the following terms:

i) Source program.

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ii) Object code

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iii) Translator (1½mks)

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13. Windows operating system provides the use of tool to help in managing storage devices and media. Distinguish between the following terms: (1 1/2mks)

i) Disk defragmenter.

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ii) Partitioning a disk

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iii) Compressing.

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14. a) Give two reasons for partitioning a disk. (1mk)

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b) List two main types of desktop publishing software. (1mk)

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c) Name any four database models. (2mks)

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15. a) Differentiate between functions and formulae. (1mk)

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b) Name four basic types of data used in a spreadsheet (2mks)

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c) Differentiate between: (1½mks)

i) Cell referencing

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ii) Relative references

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iii) Absolute referencing

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d) What is data integrity? (½ mk)

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e) Differentiate between the following errors: (1mk)

i) Transcription errors

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ii) Transposition errors

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f) The following methods are used in data protection. Explain. (2mks)

i) Audit trail

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ii) Data encryption

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iii) Log files

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iv) Fire walls

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SECTION B (60 MARKS)

Answer question 16 and any other three questions from this section

- 16.** a) Baraka wholesalers has two categories customers for order processing. Category 'A' obtains 10% discount on all orders up to ksh 10,000 otherwise the discount is 20% on the entire order. Category 'B' obtains 30% discount on all orders if the debt repayment is 'good' otherwise the discount is 15%. Draw a flow chart for the order processing. (10mks)

- b) A form four class sat for an exam in eight subjects. A student must get an average of 50% in all subjects in order to pass. A report is required that will show the name, marks obtained by each student per subject, the average mark and whether the student has passed or failed. Draw a flow chart for this report. (10mks)

17. a) Define the term network topology. (1mk)

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b) Name three advantages of computer networking. (3mks)

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c) Describe any three functions of network operating systems. (6mks)

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d) Explain the following as used in Internet services (6mks)

i) E- mail

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ii) E- commerce

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iii) E- learning

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e) Piracy means making illegal copies of copyrighted software, information or data. Outline any four ways in which the copyright law can help to reduce piracy (4mks)

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18. a) Define the term data communication. (1mk)

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b) Explain the following terms as used in data communication. (2mks)

i) Bandwidth

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ii) Attenuation

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c) Explain the following three types of computer networks (6mks)

i) LAN

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ii) MAN

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iii) WAN

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d) i) What are robots. (1mk)

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ii) Outline any four advantages of using robots in industries over human beings.

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(4mks)

e) Describe the following communication modes giving an example in each case. (6mks)

i) Simplex

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ii) Full duplex

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iii) Duplex

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19. a) Describe the following careers in the computing field. (6mks)

i) Computer Engineers

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ii) Software engineers

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iii) Computer technician

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b) Identify any three duties of an information system manager. (3mks)

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c) Giving an example, mention three categories of places where you can advance your computer skills after sitting for your K.C.S.E. (3mks)

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d) Mention any four formatting features used in Ms Word application. (4mks)

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e) Define the term electronic spreadsheet. (1mk)

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f) Explain the following terms as used in Ms Excel spread sheet package. (3mks)

i) Range

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ii) What if analysis

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iii) Automatic recalculation

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20. a) Define the term information system. (1mk)

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b) Outline three circumstances under which an organization may want may want to develop a new information system. (3mks)

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c) List down any six characteristics of a system. (6mks)

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d) Describe the term data processing. (1mk)

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e) Outline three qualities of good information. (3mks)

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f) List three file organization methods in a computer. (1mk)

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g) Briefly describe the following type of computer files. (3mks)

i) Master file

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iii) Transaction file

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iii) Back up file

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