

Name:

School:.....

Adm No.

451/1
COMPUTER STUDIES
Paper 1
THEORY
July / August 2008
2 ½ Hours

NYANDO DISTRICT JOINT EVALUATION TEST - 2008
Kenya Certificate of Secondary Education (K.C.S.E)

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COMPUTER STUDIES
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INSTRUCTIONS TO CANDIDATES:

- Answer ALL the questions in section A
- Answer question 16 (compulsory) and any other three questions from section B.

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Section	Question	Score
A	1 – 15	
B	16	
	17	
	18	
	19	
TOTAL SCORE		

This paper consists of 11 printed pages

Candidates should check the question paper to ensure that all the printed pages are printed as indicated and no questions are missing.

SECTION A (40 Marks)

Answer ALL questions from this section

1. What are peripheral devices? (1 mark)
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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. (3 marks)
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4. Identify two proper sitting postures while using the computer. (2 marks)
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5. Distinguish between cold booting and warm booting. (2 marks)
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6. Computer systems are built from three types of physical components: Processor, memories and Input/Output devices.
 - i) State two tasks of a processor. (2 marks)
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 - ii) List any four examples of computer output devices. (2 marks)

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7. Give two advantages of a Digital Versatile Disk over a normal Compact disk. (2 marks)

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

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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 compliment 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.

(3 mks)

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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? (2 marks)

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14. Computers have evolved through a number of generations. List any three characteristics of the First generation of computers. (3 marks)

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15. A worksheet contains the data as shown below.

	A	B	C	D	E	F	G
1	5		10				
2	7		15				
3	10		17				
4							
5							
6							

7							
8							
9							
10							

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. (2 marks)

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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. (2 marks)

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SECTION B (60 marks)

Answer question 16 and any other 2 questions from this section

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

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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 outputs required are; Average score and Total marks. (7 marks)

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

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

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17. a) (i) State the purpose of registers in a computer system. (1 mark)

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(ii) Give two types of registers found in the CPU. (2 marks)

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b) Describe the structure of a hard disk in reference to cylinders, tracks and sectors. (3 marks)

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c) Highlight four factors one should consider when purchasing a printer. (4 marks)

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d) Give two advantages of using electronic point-of-sale terminals as opposed to manual entry at a supermarket checkout counter. (2 marks)

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e) A school board of governors intends to put up a computer laboratory. Suggest three factors to be considered in accomplishing the above task. (3 marks)

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18. a) Your school has decided to replace its library 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 terms parallel running and direct changeover as used in system implementation. (2 marks)

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(ii) Give two disadvantages of Direct changeover over Parallel running. (1 mark)

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a) i) State two features of a graphical user interface. (2 marks)

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ii) Give two advantages of using GUI based operating systems over a Command line interface. (2 marks)

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(iii) Some computer systems still use Command line interfaces. State one advantage of command line interface. (1 mark)

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b) Explain the use of any two buttons found in a Spell-check dialog box. (2 marks)

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c) Explain the meaning of each of the following with reference to computer crime: (4 marks)

i) Tapping.

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ii) Piracy,

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iii) Trespass

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iv) Fraud.

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d) Explain four methods of classifying computers. (4 marks)

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20. Differentiate between the following terms as used in computer networking. (4mks)

(i) Modulation and demodulation.

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(ii) Multiplexing and demultiplexing.

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b) State four ways in which the feasibility of a system is assessed. (4mks)

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c) Explain how the following data security threats can be controlled. (4mks)

(i) Viruses

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(ii) Theft

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(iii) Computer errors and accidental eraser

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(iv) Unauthorised access

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d) Highlight three advantages of database systems. (3mks)
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END