

Name..... Index No.....
 School..... Candidate's sign.....
 Date.....

451/1
COMPUTER STUDIES
PAPER 1
July/August 2010
2 ½ hrs

MANGA DISTRICT JOINT EVALUATION TEST – 2010
Kenya Certificate of Secondary Education (K.C.S.E)

COMPUTER STUDIES
PAPER 1
July/August 2010
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INSTRUCTION TO CANDIDATES.

1. Write your name and index number in the spaces provided above
2. Sign and write the date of examination in the spaces provided.
3. The paper contains two sections: Section A and B.
4. Answer all questions in section A
5. Answer question 16 and any other three questions in section B
6. All answers must be written on the question paper in the spaces provided below each question.

For examiner's use only.

Section	Question	Maximum score	Candidate's score
A	1 - 15	40	
	16	15	
	17	15	
	18	15	
	19	15	
	20	15	
Total score		100	

This paper consists of 12 printed pages. Candidates should check carefully to ascertain that all the pages are printed as indicated and no questions are missing.

1. Differentiate between the following:
 - (a) Light pen and stylus. (2mks)
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 - (b) Digital camera and ordinary camera. (2mks)
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2. State two uses of OMR (2mks)
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3. (a) Differentiate between SRAM and SDRAM (2mks)
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(b) Explain why the processor of a micro computer is referred to as a micro processor (1mk)
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4. State three factors that determine the processing speed of a computer. (3mks)
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5. State two advantages of LCD over CRT monitors. (2mks)
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6. Some devices have a combination of I/O functionality. State four of such devices (2mks)

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7. State two advantages and two disadvantages of impact over non-impact printers. (4mks)

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8. List down four types of magnetic media that resemble a floppy disk. (2mks)

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9. State two advantages of USB port over the parallel port (2mks)

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10. Differentiate between operating system and utility software (2mks)

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11. State two common types of O.S used on micro computers (2mks)

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12. Mobile phones have become common ICT devices. Explain some of the powerful capabilities that come with some of the latest embedded operating systems (3mks)

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13. List down three examples of High level language (HLL) and state its most appropriate application. (3mks)

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14. Describe two types of data processing methods. (2mks)

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15. (a) Differentiate between a logical file and a physical file. (2mks)

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(b) Name four types of computer files. (2mks)

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SECTION B

Answer question 16 and any other three questions.

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

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- (b) Draw a flow chart which will simulates the processing of students reports. The simulation should be such that the user repsectedly inputs marks per subject for six subjects using a looping control structure. The computer processes the total marks and mean score of the student. If the average is greater the 50% “Pass” else “Fail” (7mks)

(c) Differentiate between analog and digital data. (2mks)

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

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17. (a) Define feasibility study as used in a system (2mks)

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(b) State four devices under direct control of the operating system. (2mks)

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(c) Briefly describe the following types of computational errors (3mks)

(i) Truncated

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(ii) Transposition

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(iii) Transcription

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(d) Explain three most commonly used coding squares (3mks)

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(e) Distinguish between online and real time processing (2mks)

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(f) State one advantage and two disadvantages of command line interface. (3mks)

Advantage

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Disadvantages

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18. (a) Explain three communication services offered through internet. (3mks)

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(ii) Describe the following internet terms. (2mks)

Link

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URL

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(b) The following is a spreadsheet relating to a farmer.

	A	B	C
1	Crop	Amount	
2	Maize	150	
3	Beans	300	
4	Cashewnuts	850	
5	Cabbages	1036	

(i) A function = IF (B2 < 200, “Not viable”), IF (B2 > 300, “Moderate”), IF (B2 > 1000, “Viable))). Write down the appropriate result return in cells C2, C3, C4 and C5. (2mks)

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(c) Text can easily be selected using a mouse in word processing. How do you select using a mouse. (2mks)

(i) Multiple paragraph

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(ii) Vertical block of text

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(d) Distinguish between the following:

(i) Window and an orphan in word processing (2mks)

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(ii) Cut and copy commands (2mks)

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(e) State one purpose of drop caps on a text paragraph. (1mk)

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(f) What is an expert system (1mk)

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19. Below are two tables structure of files in a database.

<u>Employee</u>		<u>Employee details</u>	
<u>Field</u>	<u>Data type</u>	<u>Field</u>	<u>Data type</u>
Employee name	Text	Employee Number	Number
Employee number	Auto number	Date employed	Date / time
Date of birth	Date/time	Department	Text
Address	Text	Salary	Currency

(i) Which of the two table is likely to be the parent table and why? (1mk)

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(ii) It is advisable to “enforce referential integrity” when creating a relationship. What do you understand by the term referential integrity? (2mks)

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(iii) The field “Employee Number” the employee details table is likely to be the primary key. What is a primary key. (2mks)

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(iv) Which fields in both tables is most appropriate for creating a relationship. (1mk)

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(v) What would make the relationship between the tables fail to work. (2mks)

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(b) In databases, the field properties specify finer details related to the fields and the table entries expected. State four field properties. (4mks)

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(c) State three functions of a database (3mks)

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20. (a) Define the following terms (3mks)

(i) Data control.

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(ii) Computer errors

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(iii) Sabotage

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(b) Other than computer viruses, errors are accidental, discuss any three threats to computerized system and explain the preventive measures that can be taken to avoid such threats. (6mks)

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(c) Explain what is meant by data back up and name three dangers of inadequate data backup procedures. (4mks)

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(d) Explain the implications of the legislation “prohibited publications” (2mks)

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