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ICT, MATHEMATICS AND
ENTREPRENEURSHIP
June/July 2016
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

CRAFT CERTIFICATE IN BAKING TECHNOLOGY
CRAFT CERTIFICATE IN PETROLEUM GEOSCIENCE
CRAFT CERTIFICATE IN FASHION DESIGN AND GARMENT MAKING
TECHNOLOGY
CRAFT CERTIFICATE IN FOOD AND BEVERAGE PRODUCTION SALES
AND SERVICE
CRAFT CERTIFICATE IN CATERING AND ACCOMMODATION OPERATIONS
MODULE I

ICT, MATHEMATICS AND ENTREPRENEURSHIP

3 hours

INSTRUCTIONS TO CANDIDATES

You should have the following for this examination:

*Answer booklet;
Scientific calculator fx-82 (non Programmable)/ Mathematical table.*

*This paper consists of TWO sections A and B.
Section A and B have 10 and 6 questions respectively.
Answer ALL questions in Section A as well as questions 11, 12, and 13 and any ONE question from
section B in the answer booklet provided.
Maximum marks for each part of a question are indicated.
Candidates should answer the questions in English.*

This paper consists of 5 printed pages.

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

SECTION A (40 marks)

Answer **ALL** the questions in this section.

1. State the **four** basic components of a computer system. (4 marks)
2. State **four** reasons that may account for the popularity of a flash memory as a secondary storage. (4 marks)
3. Outline **two** functions of **each** of the following keys on the keyboard:
 - (a) enter key; (2 marks)
 - (b) tabulation key. (2 marks)
4. State the units for measuring **each** of the following in a computer system:
 - (a) processor speed; (1 mark)
 - (b) RAM capacity; (1 mark)
 - (c) hard disk capacity; (1 mark)
 - (d) monitor size. (1 mark)
5. Determine the maximum capacity in litres of a fish tank measuring 60 cm by 50 cm by 2.2 m. (4 marks)
6. Solve:
 - (a) $\frac{6(-4) - (-8)(-5)}{-16}$ (2 marks)
 - (b) $37.85 - 40.62 + 31.85 - 9.6$ (2 marks)
7. A salt solution is made by dissolving 1200 grams of salt in 45 litres of water. At this rate, calculate the amount of salt in grams needed for 20,000 cm³ of water. (4 marks)
8. Organisations are increasingly making use of consultancy services. State **four** reasons that may account for this practice. (4 marks)
9. Explain the meaning of **each** of the following terms as used in entrepreneurship:
 - (a) entrepreneurial culture; (2 marks)
 - (b) business plan. (2 marks)
10. Outline **four** activities that an entrepreneur may carry out before starting an enterprise. (4 marks)

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SECTION B (60 marks)

Answer questions 11, 12, and 13 and any other ONE question from this section.

11. (a) Draw a directory structure for a computer file system with the following files:

D:\DIPLOMA\Term1\Exam1.doc
 D:\CRAFT\Term1\Exam1.doc
 D:\DIPLOMA\Term1\Exam2.doc

(5 marks)

- (b) Figure 1 shows an extract of a document created using a word processor. Use it to answer the question that follow

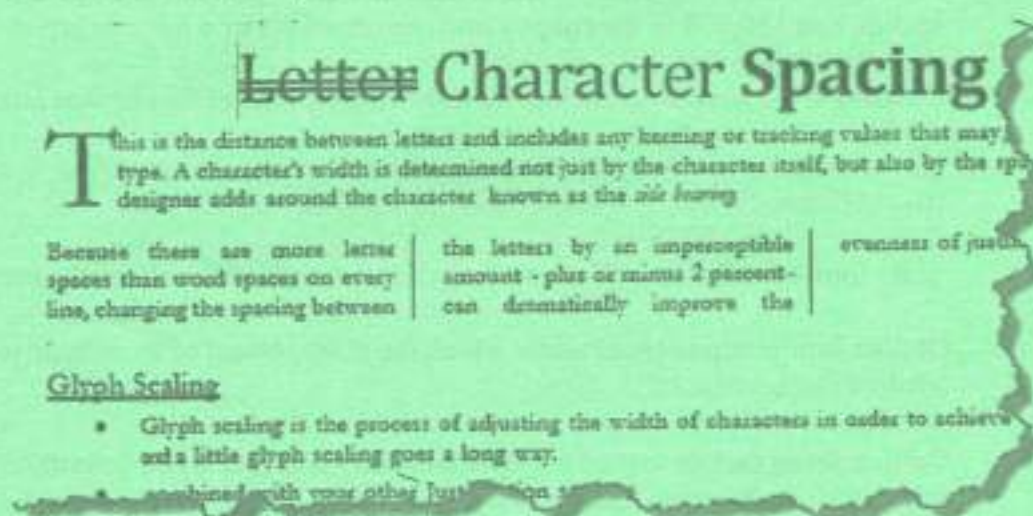


Figure 1

Identify six formats that have been applied the document section. (3 marks)

- (c) State four features in a word processor that may be used to make corrections on a created document (4 marks)
- (d) State three equipment that may be required when setting up a LAN (3 marks)

12. (a) A sample of plastic pipe is expanded as shown in table 1:

Table 1

Length (L) mm	1000	1001.1	1002.3	1003.1
Temperature (T) °C	20	32	54	

- (i) plot a graph of length (L) against temperature (T); (3 marks)
- (ii) Determine the equation of the line drawn in (i). (3 marks)

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(iii) Find the length of the pipe at 10°C . (2 marks)

(b) On a particular day, XYZ bank bought and sold foreign currency at the rate shown in table 2.

Table 2

	Buy	Sell
Dollar (\$)	80	82
Euro (€)	120	127
Pound (£)	10	150
Korean Won (W)	4	45

A visiting tourist converted 100,000 Korean Won to Kenya Shillings at the bank, spends Ksh 100,000 in the country and converted $\frac{2}{3}$ of what was left to Dollars and the remaining to Euros.

Determine the amount of each of the following currencies that he was left with in :

- (i) Dollars; (5 marks)
 (ii) Euros. (2 marks)

13. (a) State **four** contributions of entrepreneurship towards national development. (4 marks)
 (b) Outline **four** circumstances under which the management of an enterprise may conduct market research. (4 marks)
 (c) Outline **seven** factors that an entrepreneur may consider when determining the suitability of a business location. (7 marks)
14. (a) In a spread sheet program, state the formula that would be displayed when each of the following formulae typed in cell A1 is copied to cell D4:
 (i) = SA3 (1 mark)
 (ii) = BS1 (1 mark)
 (iii) = SAS1 (1 mark)
- (b) Table 3 shows details about books entered in a database by a bookshop. Use it to answer the questions that follow.

Table 3

ISBN	Title	Paperback or Hardback	Price
0718102096	Mewingu nene	H	300
0709165595	Masomo Kiswani	H	250
0006163831	Light the tree	P	300
0590554662	The hot persult	P	500
1852251980	Stacey's Autobiography	H	310

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State **one** field where the :

- (i) currency data type would be appropriate ; (1 mark)
- (ii) boolean /logical data type would be appropriate. (1 mark)
- (c) Ann intends to install several categories of packages in a new laptop. Explain **three** factors other than cost , that she may consider when selecting the software. (6 marks)
- (d) State **four** benefits that an organisation may derive from using email technology for communication. (4 marks)
15. (a) From a group of six men and women, five people are to be chosen at random. Determine the number of ways of selecting more men than women. (6 marks)
- (b) A study conducted on 20 families to ascertain the number of children per family is as shown in table 4.

Table 4.

No of children per family	1	2	3	4	5
No of families	3	4	8	2	3

Determine the:

- (i) mean number of children per family; (4 marks)
- (ii) standard deviation. (5 marks)
16. (a) State **three** ways that an entrepreneur may use to generate a business idea. (3 marks)
- (b) Explain **three** factors that may facilitate the spread of HIV/AIDS in the society. (6 marks)
- (c) Explain **three** guidelines that an organisation may follow in order to enforce effective social responsibility. (6 marks)

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