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**ICT, MATHEMATICS AND
ENTREPRENEURSHIP**
June/July 2019
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

**CRAFT CERTIFICATE IN BAKING TECHNOLOGY
CRAFT CERTIFICATE IN CHILDCARE AND PROTECTION
CRAFT CERTIFICATE IN PETROLEUM GEOSCIENCE
CRAFT CERTIFICATE IN FASHION DESIGN AND GARMENT MAKING TECHNOLOGY
CRAFT CERTIFICATE IN FOOD AND BEVERAGE PRODUCTION SALE AND SERVICE
CRAFT CERTIFICATE IN CATERING AND ACCOMMODATION OPERATIONS
CRAFT CERTIFICATE IN FOOD PROCESSING AND PRESERVATION TECHNOLOGY
CRAFT CERTIFICATE IN SCIENCE LABORATORY TECHNOLOGY
CRAFT CERTIFICATE IN FISHERIES SCIENCE AND TECHNOLOGY
CRAFT CERTIFICATE IN NUTRITION AND DIETETICS**

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 tables.

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 and questions 11, 12 and 13 and ONE other question from section B in the answer booklet provided.

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. The following are abbreviations used in computers. Write each of in full:

(a) DVD;

(b) CD ROM;

(c) OMR;

(d) MICR.

(4 marks)

2. Outline four measures that may be taken to reduce dust in a computer laboratory. (4 marks)

3. Explain two ways in which a computer operating system organizes information in storage media. (4 marks)

4. Explain two tools in a word processor that may help a user to minimize spelling errors when creating a document. (4 marks)

5. Evaluate:

$$-3 \times -2 + 18 \div -3 - (-4)$$

(4 marks)

6. The gradient of a straight line is 5. If it passes through the point P(1, 13), determine the value of y when $x = 4$ on the line. (4 marks)

7. Evaluate:

(a) $\frac{8! \times 6!}{4! \times 9!}$;

(b) ${}_{12}P_8 \div {}_{10}C_6$.

(4 marks)

8. Explain the way in which each of the following factors may lead to success in entrepreneurship:

(a) risk tolerance;

(2 marks)

(b) responsiveness.

(2 marks)

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9. State **four** types of services that a bank may offer to an entrepreneur. (4 marks)
10. Outline **four** legal requirements that an entrepreneur should meet before starting a business in Kenya. (4 marks)

SECTION B (60 marks)

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

11. (a) Explain the meaning of each of the following terms as used in spreadsheet charts:
- (i) data range;
 - (ii) legend;
 - (iii) label.
- (6 marks)
- (b) Explain the **three** parts of an email address. (6 marks)
- (c) Outline **three** disadvantages of computer networks. (3 marks)
12. (a) Given the data:
- 12, 13, 14, 13, 15, 12, 34, 32, 33, 21
32, 19, 16, 17, 26, 22, 20, 14, 27, 28
25, 23, 31, 19, 17, 15, 11, 13, 14, 12;
- tabulate the information in a frequency table of classes ;
- 11 - 15, 16 - 20, ...
- (6 marks)
- (b) (i) A man bought a machine for Ksh 40,000 and later sold it at Ksh 50,000. Calculate his percentage profit on cost price.
- (ii) If a discount of 5% was awarded in (i), calculate the selling price. (6 marks)
- (c) List **three** types of diagrams used in presentation of statistical data. (3 marks)

13. (a) Explain **four** strategies that the management of an organisation may adopt to encourage innovation among the employees. (8 marks)
- (b) Outline the steps involved in the entrepreneurial process. (7 marks)
14. (a) Explain **three** challenges that may be experienced by organizations using e-commerce. (6 marks)
- (b) List **three** input devices of a computer that may be used to enter data and instructions by controlling a pointer on the screen. (3 marks)
- (c) Explain each of the following data types used in a database:
- (i) auto number;
- (ii) currency;
- (iii) memo. (6 marks)
15. (a) Evans., Patrick and Samuel are partners in a business. Their capital contribution in Ksh are 1,000,000; 800,000 and 400,000 respectively. The net profit made in a certain year was Ksh 880,000. If they shared the profit in the ratio of their capital contribution, determine the amount each got. (7 marks)
- (b) In figure 1 AB is parallel to CG and DEF is a semi circle.

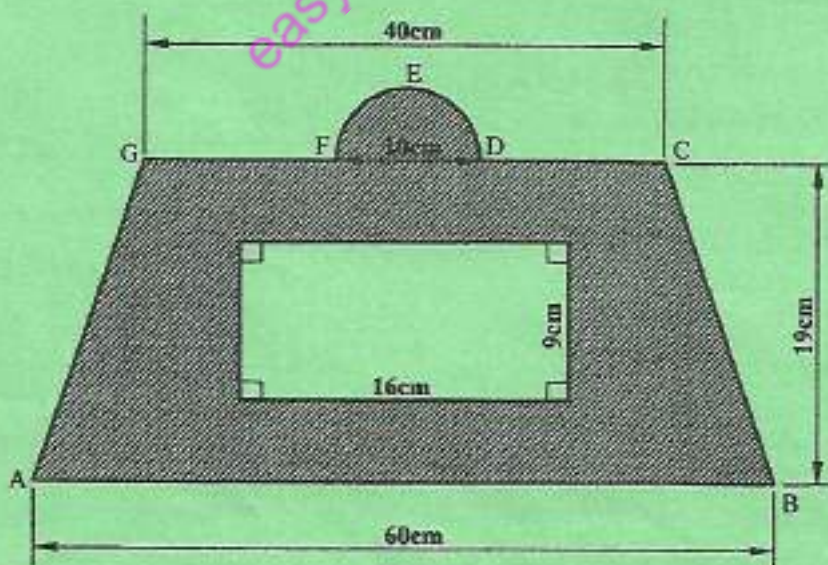


Fig. 1

Determine the area of the shaded region.

(8 marks)

16. (a) State **six** consequences of ineffective communication to a business enterprise. (6 marks)
- (b) Outline **five** challenges that an entrepreneur may face when transacting business through mobile banking. (5 marks)
- (c) Explain each of the following terms:
- (i) entrepreneurship;
 - (ii) business plan.
- (4 marks)

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