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

MODULE I

ICT, MATHEMATICS AND ENTREPRENEURSHIP

3 hours

INSTRUCTIONS TO CANDIDATES

You should have the following for this examination:
   Mathematical tables/a non programmable scientific calculator;
   Answer booklet.
This paper consists of TWO sections; A and B.
Answer ALL questions in Section A. Answer questions 11, 12 and 13 and ONE other question from section B.
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.

    Turn over

SECTION A (40 marks)

Answer ALL the questions in this section.

1. Explain each of the following terms as used in computer systems:

   (a) authenticity;

   (b) portability. *It mean that they can be portable and easy to carry carring* (4 marks)

2. Distinguish between copy command and cut command as used in operating system. *copy comand it is to produce the same copies* (4 marks)

3. State **four** ways in which computer viruses may spread. (4 marks)

4. Highlight **four** advantages on the use email in an enterprise. (4 marks)

5. (a) Simplify by rationalizing the denominator of the expression:

   $$\frac{4}{\sqrt{18}+\sqrt{5}}$$

   (b) Evaluate

   $$-15 \div 4 \times 8 + 20$$

   (4 marks)

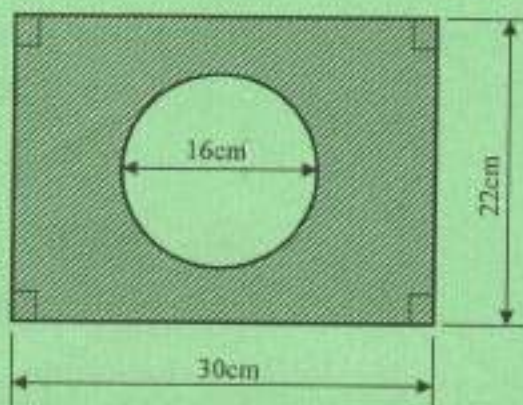6. Determine the area of the shaded region in figure 1.

   (4 marks)

Fig. 1

7.   Convert:

  (a)   27 litres to gallons, if 1 gallon = 4.5 litres.   (2 marks)

  (b)   20 joules to calories, given that 1 joule = 4.186 calories.   (2 marks)

8.   Highlight **four** traits that a successful entrepreneur should possess.   (4 marks)

9.   State **four** factors that may hinder innovation among the employees of an organization.
   (4 marks)

10.   Explain the contribution of small enterprises to a country on the following guidelines:

  (a)   capital formation;

  (b)   reduction of income inequalities.
   (4 marks)

SECTION B (60 marks)

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

11.   (a)   (i)   Explain the term network server.
          (ii)   Outline **three** benefits of a network to a college.
   (5 marks)

    (b)   Explain the function of each of the following features of a spreadsheet program:

          (i)   name box;
          (ii)   formula bar;
          (iii)   cell pointer.
   (6 marks)

    (c)   Distinguish between indention and alignment as used in word processing.   (4 marks)

12.   (a)   Determine the equation of the straight line that passes through the points P(1,2) and Q(3, -4).   (5 marks)

    (b)   If y is directly proportional to x and y = 144 when x = 4. Determine the value of y when x = 15.

    (c)   (i)   Evaluate $8P_1 \times {}^{10}C_3$.

          (ii)   In a plant, the probabilities that machines A and B will fail in a week's time are $\frac{2}{9}$ and $\frac{5}{17}$ respectively. Determine the probability that atmost one of the machines fail in a week's time.   (7 marks)

13. (a) Job recently got a promotion at his place of work. Outline **four** benefits of such a promotion to Job. (4 marks)

    (b) State **six** factors that may make a business to fail at the start-up phase. (6 marks)

    (b) Highlight **five** criteria that may be used evaluate a business opportunity. (5 marks)

14. (a) Explain **three** hardware considerations to be made when installing an operating system. (6 marks)

    (b) (i) Describe the term 'form' as used in databases.
        (ii) Highlight **three** uses of a form in a database. (5 marks)

    (c) (i) State **one** requirement for installing speech input in computers.
        (ii) Outline **three** challenges of using speech input to capture data. (4 marks)

15. (a) List **three** methods of collecting primary data when conducting a research. (3 marks)

    (b) Table I shows the units of electricity consumed by 225 micro-enterprises in Kwh for the month of March 2015.

    Table I

Units of Electricity	No. of micro-enterprises
50 - 70	5
70 - 90	25
90 - 110	85
110 - 130	65
130 - 150	45

    Determine the:

    (i) mean;
    (ii) median;
    (iii) standard deviation.

    (12 marks)

16. (a) State **four** reasons that make it necessary for employees to manage time effectively.

(4 marks)

(b) (i) Explain the importance of the executive summary in a business plan.

(ii) Outline **five** types of information that may be contained in the executive summary for a start-up company.

(7 marks)

(c) State **four** advantages of using information communication technology (ICT) in enterprise operations. (4 marks)

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