THE KENYA NATIONAL EXAMINATIONS COUNCIL

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 SOCIAL WORK AND COMMUNITY DEVELOPMENT
CRAFT CERTIFICATE IN FOOD PROCESSING AND PRESERVATION TECHNOLOGY
CRAFT CERTIFICATE IN SCIENCE LABORATORY TECHNOLOGY
CRAFT CERTIFICATE IN FISHERIES SCIENCE AND TECHNOLOGY
CRAFT CERTIFICATE IN SUSTAINABLE AND ECOLOGICAL AGRICULTURE
CRAFT CERTIFICATE IN BAKING 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 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 and questions 11, 12 and 13 and ONE other 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. Outline **four** advantages of electronic spreadsheets. (4 marks)

2. Distinguish between hardware and software as used in computers. (4 marks)

3. Explain each of the following terms as used in the internet:

   (a) search engine; (2 marks)
   (b) newsgroup. (2 marks)

4. Explain **two** reasons that make it necessary to shutdown a computer using the correct procedure. (4 marks)

5. A right-angled triangle has sides 16 cm, 30 cm and 34 cm. Calculate its:

   (a) perimeter;
   (b) area.

   (4 marks)

6. Evaluate: $0.12 \div 3 \times 4.5 + (0.1 - 0.3)$. (4 marks)

7. Convert the following measurement:

   (a) 48750 cm^3 to litres;
   (b) 100 kilojoules to joules.

   (4 marks)

8. Outline **four** purposes served by the marketing plan section of a business plan. (4 marks)

9. State **four** roles played by an entrepreneur in preparation for starting a business enterprise.
   (4 marks)

10. Highlight four reasons that may make entrepreneurs to insure business ventures. (4 marks)

SECTION B (60 marks)

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

11. (a) State **two** types of input devices under each of the following categories:

      (i) pointing;

      (ii) keying.

                    (4 marks)

(b) The following document was prepared using a word processor.

ICT ETHICS AND PROFESSIONALISM

Ethics is concerned with issues of value, such as judgments about what constitutes "good" or "bad" behaviour in any given context, Ethics are the standards, values, morals, principles, which guides one's decisions or actions. It refers to the principles of right and wrong that individuals, acting as free moral agents, use to make choices to guide their behaviours.

Why should we have a Professional Code of Ethics?
A Professional Code of Ethics serves several functions:
1) Symbolises the professionalism of the group.
2) Defines and promotes a standard for external relations with clients and employers.
3) Protects the group's interests
4) Codifies members' rights.

ICT Ethics relate to the standards of conduct governing individual, institution's societies' and international use of information & communication technology. Professional ethics are a code of conduct that govern how members of a profession deal with each other and with third parties.

      (i) Outline **six** formatting features applied on the document.

      (ii) State the word processing tool that would be used to automatically replace every instance of the word 'ethics' in the document.   (7 marks)

(c) Explain each of the following terms used in data security:

      (i) virus;

      (ii) spyware.

                    (4 marks)

1801/101 1805/101 1903/101   1906/101   **3**
1802/101 1819/101 1904/101   1907/101
1804/101 1901/101 1905/101   1908/101
Oct. / Nov. 2022   **Turn over**

12. (a) The probabilities that machines A and B are faulty are $\frac{2}{15}$ and $\frac{1}{10}$ respectively. Determine the probability that:

      (i) both are faulty;

      (ii) only B is faulty.

                              (5 marks)

    (b) A salesman earns a monthly salary of Ksh 40,500. In addition he is paid commission at 5% of sales in a certain month, his sales were Ksh 500,000. Determine his gross salary for the month.   (4 marks)

    (c) (i) State **three** types of charts used in data representation.

        (ii) Given that the mean of the data 8, 2, 9, 5, x is 6.
            Calculate the value of x.

                              (6 marks)

13. (a) State **four** responsibilities of an entrepreneur in human resource planning.   (4 marks)

    (b) Explain **three** contributions of innovation to a business enterprise.   (6 marks)

    (c) Outline **five** features of a public limited company as a form of business ownership.

                              (5 marks)

14. (a) Outline **four** limitations of tailor made software.   (4 marks)

    (b) Bella is in the process designing a new database. State **five** database management objects that she may use.   (5 marks)

    (c) Identify the computer keyboard commands used to perform each of the following tasks:

      (i) print a document;

      (ii) undo;

      (iii) paste copied text.

                              (3 marks)

    (d) Outline **three** features of a Local Area Network (LAN).   (3 marks)

1801/101 1805/101 1903/101   1906/101   4
1802/101 1819/101 1904/101   1907/101
1804/101 1901/101 1905/101   1908/101
Oct. / Nov. 2022

15. (a) Three brands of wheat flour A, B and C are mixed in the ratio 5:6:9. Determine the weight of each brand in a mixture weighing 6000 kg. (5 marks)

(b) A straight line is given by the equation $4x + 3y = 9$. Determine the:

   (i) gradient;
   (ii) y-intercept;
   (iii) x-intercept.

   (5 marks)

(c) A cuboid crate has dimensions 100 cm by 80 cm by 40 cm. Calculate the volume of 40 such crates in m^3. (5 marks)

16. (a) Outline **four** challenges that a business may face when using Information Communication Technology (ICT) in its operations. (4 marks)

(b) Dan was operating a sole proprietorship form of business that recently closed down. Highlight **five** factors that may have led to the closure of the business. (5 marks)

(c) Entrepreneurship has been recognised as a major contributor to the economic development of a country. Explain three reasons for this recognition. (6 marks)

THIS IS THE LAST PRINTED PAGE.