

Name: _____

Index No: _____/_____

1507/113, 1819/101

1801/101, 1901/101

1802/101 1907/101

ICT, MATHEMATICS AND
ENTREPRENEURSHIP

Oct./Nov. 2015

Time: 3 hours



Candidate's Signature: _____

Date: _____

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

Write your name and index number in the spaces provided above.

Sign and write the date of the examination in the spaces provided above.

You should have a scientific calculator for this examination.

This paper consist of **TWO** Sections; **A** and **B**.

Answer **ALL** questions in section **A**, as well as questions **Q11**, **Q12** and **Q13** and any **ONE** question from section **B** in the spaces provided.

Marks for each part/and section of a question are as indicated.

Do **NOT** remove any pages from this question paper.

Candidates should answer the questions in English.

For Examiner's Use Only

Section	Question	Maximum Score	Candidate's Score
A	1 - 10	40	
B	11	15	
	12	15	
	13	15	
		15	
Total Score			

This paper consists of 16 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

Answer **ALL** the questions in this section in the spaces provided after each question.

1. Distinguish between analog computers and digital computers. (4 marks)
-
-
-
-
2. State **two** examples of each of the following output devices:
- (a) hard copy out devices; (2 marks)
-
-
- (b) soft copy out devices. (2 marks)
-
-
3. Explain the function of each of the following mouse activities:
- (a) double-click; (2 marks)
-
-
- (b) Scrolling. (2 marks)
-
-
4. Outline **four** ways through which software can be acquired by a college. (4 marks)
-
-
-
-

5. Tim coal company mined $6\frac{1}{2}$ tonnes on Monday, $7\frac{3}{4}$ tonnes on Tuesday and $4\frac{1}{2}$ tonnes on Wednesday. If the company intends to mine 25 tonnes in the week, determine the number of tonnes that must be mined for remainder of the days of the week . (4 marks)

6. Determine the equation of the line that passes through (1,4) and is parallel to the line whose equation is $x + 2y = 5$. (4 marks)

7. Box 1 contains two red balls and three green balls. Box 2 contains four red balls and one green ball. One ball is picked at random from box 1 and placed in box 2. Once more, a ball is picked at random from box 2. Determine the probability that the ball picked from box 2 is green. (4 marks)

8. State **four** criteria that an entrepreneur may use to evaluate a new business opportunity. (4 marks)

9. Outline **four** elements that should be included in the executive summary of a business plan. (4 marks)

10. State **four** obstacles which may inhibit the development of entrepreneurship in the developing countries. (4 marks)

SECTION B

Answer question 11, 12, 13 and any other **ONE** question from this section in the spaces provided after question 16.

11. (a) State **four** ways in which an operating system can be used to manage a storage media. (4 marks)
- (b) Distinguish between cold booting and warm booting as used in computers. (4 marks)
- (c) Outline **four** ways in which a user can customise an operating system after its installation. (4 marks)
- (d) Ann created a table in a word processor. Outline **three** formats that she could have applied on the table. (3 marks)
12. (a) A student has seven books that she would like to place in her bag. The bag has room for only four books. Calculate the number of ways of placing four books into the bag. (4 marks)
- (b) A team of four people is being formed. There are four different positions on the team. Determine the number of ways to assign the four people to the four positions. (4 marks)
- (c) Figure 1 shows a plan of land having dimensions in centimetres. If the plan is to the scale 1:200,000 determine the actual area in m^2 . (7 marks)

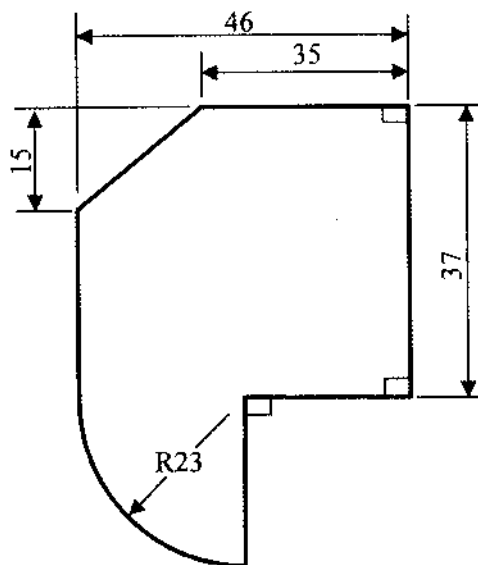


Fig. 1

13. (a) Outline **three** circumstances under which sole proprietorship may be a favourable form of business ownership. (3 marks)
- (b) Human resource planning is an important aspect of management. Explain **three** objectives that this practice may seek to achieve in an organisation. (6 marks)
- (c) Explain **three** benefits that may accrue to an organisation that encourages effective communication. (6 marks)

14. (a) Distinguish between relative and absolute cell referencing as used in spreadsheet. (4 marks)
- (b) Table 1 shows a query table in a database program. Use it to answer the questions that follow:

Table 1

Field	ADNO	NAME	CAT
Table	FORM1	FORM1	FORM1
Sort	Ascending		
Show	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria		like ("J*")	

- (i) State the:
- (I) name of the table; (1 mark)
- (II) appropriate data type for the fields. (1 mark)
- (ii) Explain the query. (3 marks)
- (c) Describe each of the following types of network:
- (i) LAN; (1 mark)
- (ii) WAN. (1 mark)

(d) Write each of the following abbreviations used in computers in full:

- (i) MAN; (1 mark)
- (ii) WWW; (1 mark)
- (iii) ATTP; (1 mark)
- (iv) BCC. (1 mark)

15. (a) Figure 2 shows a solid prism having dimensions in cm.

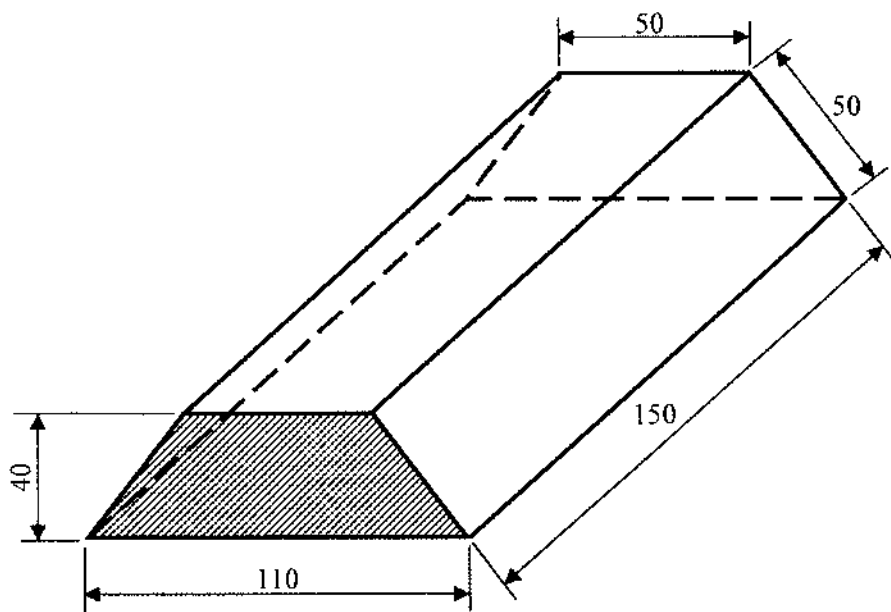


Fig. 2

Calculate its:

- (i) volume; (4 marks)
- (ii) surface area. (5 marks)

- (b) The number of points scored by three teams A, B and C in a season are as shown in table 2.

Table 2

Team	A	B	C
Points	90	108	96

Draw a bar graph for the points using a vertical scale , ranging from 80 to 110.

(6marks)

16. (a) State **three** reasons that may make an individual to prefer self employment to salaried employment. (3 marks)
- (b) Explain **three** benefits that may accrue to an organisation that is innovative. (6 marks)
- (c) Explain **three** technical limitations of e-commerce. (6 marks)