

0801/205

0802/205

0803/205

SUPPORT SUBJECTS

November 2024

Time: $2\frac{1}{2}$ hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

**ARTISAN CERTIFICATE IN CLERK/TYPIST
ARTISAN CERTIFICATE IN SALESMANSHIP
ARTISAN CERTIFICATE IN STORE KEEPING**

SUPPORT SUBJECTS

$2\frac{1}{2}$ hours

INSTRUCTIONS TO CANDIDATES

This paper consists of 22 questions in TWO sections; A and B.

Section A consists of Mathematics - Part I and Part II. Answer ALL questions in Part I and any TWO questions from Part II.

Section B consists of General Studies - Part I and Part II. Answer both questions in Part I and any SIX questions from Part II.

Answers should be written in the answer booklet provided.

All questions carry equal marks.

Candidates should answer the questions in English.

This paper consists of 8 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: MATHEMATICS

PART I (30 marks)

Answer *ALL* the questions in this section.

1. Simplify $\frac{4^6 \times 5^8 \times 6^{10}}{2^4 \times 25^3 \times 6^6}$. (3 marks)

2. Chebet started her journey from Komo at 8 a.m. She drove towards Kamati at an average speed of 60 km per hour, where she arrived at 9 a.m. She rested for one hour, she then drove for two hours from Kamati to Kereta at an average speed of 80 km per hour.

Plot the journey on a distance time graph. (3 marks)

3. The circumference of a circle is 111 m. Calculate the area to two decimal places.
Take: $\pi = \frac{22}{7}$. (3 marks)

4. The diagram below shows a playing field.

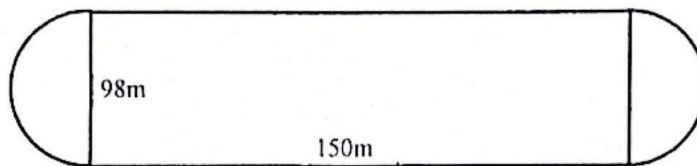


Fig. 1

Calculate the perimeter of the field. (3 marks)

5. The price of a goat is Ksh. x , while the price of a sheep is Ksh. y less than the price of a goat. A trader bought 25 goats and 18 sheep.

Determine the total cost of the goats and sheep. (3 marks)

6. A right angled triangle measures 9 cm by 12 cm by 15 cm.
Calculate the area of the triangle. (3 marks)

7. A salesman earns a commission of 12% on sales. During the month of March 2023, he earned a commission of Ksh. 7,200.

Calculate the sales for the month. (3 marks)

8. The sales of a company for four years is as follows.

	Ksh.
2020	15 m
2021	8 m
2022	6 m

Present the data above on a bar chart.

(3 marks)

9. A cone has a base diameter 42 cm and a vertical height of 28 cm.
Calculate the slant height of the cone.

(3 marks)

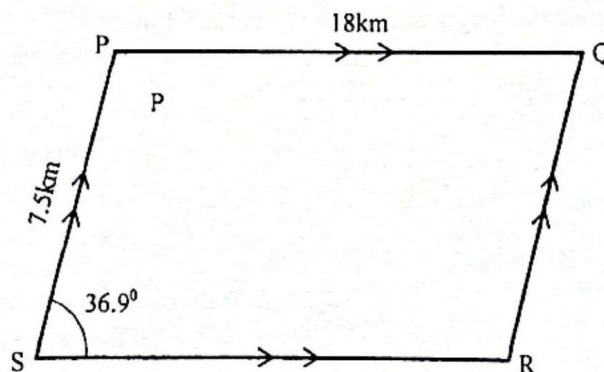
10. Solve for x , if $x^2 + 8x + 15 = 0$.

(3 marks)

PART II (20 marks)

Answer any **TWO** questions from this part.

11. (a) A piece of land has a parallelogram shape as shown below.



Calculate the area of the piece of land.

(5 marks)

- (b) A farmer grows bananas, coffee and macadamia. Last year, the sales of coffee were triple the sales of bananas, while the sales of macadamia were double the sales of coffee.

Draw a pie chart showing the angles represented by each of the products.

(5 marks)

12. (a) Waithira sold a machine at a profit of 10% on cost to Wanjala. Wanjala sold it to Fatuma at a profit of 15%. Fatuma sold it to Wambua at a profit of 20%.

Determine the cost of the machine to Waithira if Wambua received Ksh. 698,280.

(5 marks)

- (b) A lawn has a rectangular shape with dimensions of 45 m long by 30 m wide. The lawn is surrounded by a path of a uniform width of 2 m.

Determine the area of the path.

(5 marks)

13. (a) The average marks in Mathematics Examination in four schools were as follows:

School	No. of students	Average marks
Samaki	36	70
Ndege	14	64
Haraka	24	82
Mwangaza	26	55

Calculate the average marks for the four schools combined.

(5 marks)

- (b) The length of a table top is 50 cm longer than its breadth. The area of the table top is 3 m^2 . Determine the length and width of the table top.

(5 marks)

SECTION B: GENERAL STUDIES

PART I (20 marks)

Answer both questions in this part.

14. Dola Traders is in the process of preparing its budget for the month of April 2024.

The following information is available.

	Ksh.
(i) Expected sales	
Cash (April)	300,000
Credit (April)	80,000
Credit (March)	140,000
70% of credit sales is received in the month of sale and the balance in the month after.	
(ii) Expected purchases	Ksh.
Cash (April)	149,000
Credit (April)	90,000
Credit (March)	120,000
55% of credit purchases are paid in the month of purchase and the balance in the month after.	
(iii) Expenses payable on monthly basis	Ksh.
Insurance	47,000
Carriage inwards	25,500
Electricity	12,000
Water	8,000
Wages	54,000
(iv) An equipment will be purchased for Ksh. 60,000 and be paid for in April 2022.	
(v) A bank loan of Ksh. 100,000 will be received in April 2024.	
(vi) The expected cash balance on 1 April 2024 is Ksh. 71,000.	

Prepare a cash budget for the month of April 2024.

(10 marks)

15. Read the Passage below and answer the questions that follow.

According to a survey by the Central Bank of Kenya, agriculture, the mainstay of the Kenyan economy, has continued to **decline** over the last few decades. Kenyan farmers have cited high transport cost as the leading factor that has negatively affected food production. The price of fuel has continued to rise yet fuel is critical for transport of goods and operating agricultural machinery.

In addition, the survey found that other factors such as unpredictable weather patterns and high cost of farm inputs have contributed significantly to the decline in food production. The Covid-19 pandemic also had a negative impact on the agricultural sector. Moreover, some respondents mentioned lack of market, high labour costs and the war in Ukraine as having affected market supplies.

As part of recommendations by farmers and traders on how to improve food production, the respondents **stated** that a reduction in fuel cost would bring down the cost of production and transport. They also recommended sub-division of land be discouraged so as to promote large-scale farming and mechanisation. Reduction in tax levies to support farming and trading activities was another recommendation. Farmers, further, recommended that the government should help in creating markets for agricultural produce.

They also recommended that farmers and traders be provided with cheap loans to enable them purchase the necessary farm inputs to increase production. In addition, there should be a reduction in the cost of inputs such as fertilizers and seeds. The respondents, further, felt that construction of more dams to counter adverse weather conditions would go a long way in supporting farming activities in Kenya. Putting measures in place to control importation of farm produce from neighbouring countries would create a market for local produce.

If all these recommendations are **put in place**, the current food production which has been on the decline, will improve significantly.

Adapted from: "The Standard," Tuesday, August 2, 2022.

- (a) State the meaning of the following words and phrase as used in the passage. (3 marks)
- (i) decline;
 - (ii) stated;
 - (iii) put in place.
- (b) In about 100 words and according to the passage. Explain the recommendations given on how to improve food production in Kenya. (7 marks)

PART II (30 marks)

Answer any SIX questions from this section.

16. (a) List **two** ways in which physical distance may be a barrier to effective communication. (2 marks)
- (b) List **three** advantages of oral communication. (3 marks)
17. (a) State **two** factors that are considered when designing official forms. (2 marks)
- (b) List **three** methods that may be used to gather information when writing a report. (3 marks)
18. (a) State **two** sources of equity finance. (2 marks)
- (b) List **three** benefits of using wind energy. (3 marks)
19. (a) State **two** advantages of improvisation. (2 marks)
- (b) List **three** reasons why a listener should maintain eye contact during face to face communication. (3 marks)

20. (a) State **two** uses of a subject heading in a formal letter. (2 marks)
- (b) List **three** challenges that a single parent family may face when bringing up children. (3 marks)
21. (a) State **two** negative effects of floods to human beings. (2 marks)
- (b) List **three** factors that contribute to a high crime rate in Kenya. (3 marks)
22. (a) List **two** benefits that an entrepreneur may get from selling products on-line. (2 marks)
- (b) State **three** functions of county governments in Kenya. (3 marks)

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