

0801/205

0802/205

0803/205

**SUPPORT SUBJECTS**

**November 2018**

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



**THE KENYA NATIONAL EXAMINATIONS COUNCIL**

**ARTISAN CERTIFICATE IN CLERK/TYPIST COURSE  
ARTISAN CERTIFICATE IN SALESMANSHIP  
ARTISAN CERTIFICATE IN STOREKEEPING**

**SUPPORT SUBJECTS**

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

**INSTRUCTIONS TO CANDIDATES**

*This paper consists of **TWO** sections; A and B.*

*In section A, 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**.*

*Write your answers in the answer booklet provided.*

*Candidates should answer the questions in English.*

**This paper consists of 6 printed pages.**

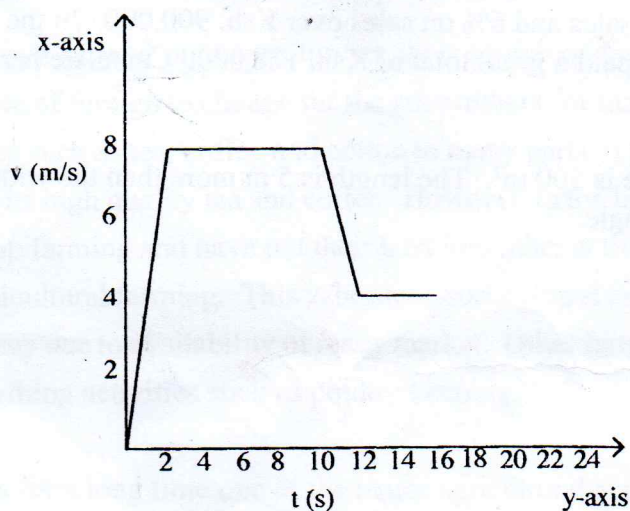
**Candidates should check the question paper to ascertain that  
all the pages are printed as indicated and that no questions are missing.**



15-10-2018  
19  
SECTION A: MATHEMATICS  
PART I (30 marks)

Answer ALL questions in this part.

1. The mass of a packet of flour is stated as 2 kg but the actual measurement is 1.85 kg. Determine the percentage error. (3 marks)
2. Calculate the area of a right angled triangle measuring 90 cm by 120 cm by 150 cm and express the answer in square metres ( $\text{m}^2$ ). (3 marks)
3. The cost of two bananas and three oranges is Ksh. 80. The cost of one banana and four oranges is Ksh. 90. Calculate the cost of one orange. (3 marks)
4. The two parallel sides of a trapezium measure 20 cm by 14 cm. The perpendicular distance between the parallel lines is 12 cm. Calculate the area of the trapezium. (3 marks)
5. John took a loan at a simple interest rate of 5% per annum for three years. He paid an interest of Ksh. 15,000 at the end of the three years. Compute the principal amount. (3 marks)
6. The marks scored by ten students in a mathematics examination were 59, 74, 44, 33, 49, 71, 24, 89, 58 and 63. Determine the median mark. (3 marks)
7. The volume of a cone is  $2,156 \text{ cm}^3$ . The cone has a height of 10.5 cm. Calculate the radius of the cone. (3 marks)
8. Solve the following equation:  
 $6x^2 - 17x + 12 = 0$  (3 marks)
9. The following velocity-time graph shows the motion of an object.



Calculate the acceleration of the object between the time  $t = 10$  seconds and  $t = 12$  seconds.

(3 marks)



10. The three sides of a right angled triangle measure 6 cm, 8 cm and 10 cm. Calculate the cosine of the smallest acute angle in the triangle. (3 marks)

PART II (20 marks)

Answer **TWO** questions from this part.

11. (a) At Wetu Secondary School,  $\frac{1}{3}$  of the students take lunch prepared in school,  $\frac{1}{2}$  of the remainder bring packed lunch and the rest go home for lunch. Calculate the fraction of students who go home for lunch. (5 marks)

- (b) The size of a farm is  $700 \text{ m} \pm 0.5 \text{ m}$  by  $500 \text{ m} \pm 0.1 \text{ m}$ . The cost of fertilizer is Ksh. 2,500 per bag. An area of  $4900 \text{ m}^2$  requires one bag of fertilizer.

Calculate:

- (i) the maximum size of the farm;  
(ii) maximum cost of fertilizer required for the farm. (5 marks)

12. (a) Solve the following equation:

$$\frac{2x+3}{5} = \frac{4x+7}{8} - \frac{x+1}{4} \quad (5 \text{ marks})$$

- (b) A regular pyramid has a square base of 16 cm. The slant height of a side is 17 cm. Calculate the total surface area of the pyramid. (5 marks)

- (a) Buyai earns a basic monthly salary of Ksh. 35,000. She also earns a 5% commission on the first Ksh. 900,000 sales and 6% on sales over Ksh. 900,000. In the month of July 2018, Buyai was paid a gross total of Ksh. 128,000. Calculate her total sales for the month. (5 marks)

- (b) The area of a rectangle is  $500 \text{ m}^2$ . The length is 5 m more than the width. Calculate the perimeter of the rectangle. (5 marks)



**SECTION B (60 marks)**

**PART I (20 marks)**

*Answer **BOTH** questions in this part.*

**14. Book-keeping.**

The following information relates to Jaribu Traders for the year ended 28 February 2018:

	<b>Ksh</b>
Purchases	197,000
Returns inwards	38,000
Inventory:	
1 March 2017	35,000
28 February 2018	29,000
Carriage inwards	53,000
Wages and salaries	103,000
Discounts received	56,000
Discounts allowed	41,000
Motor vehicle expenses	45,000
Bad debts	18,000
Telephone	12,000
Rent payable	25,000

Prepare the trading and profit and loss account for the year ended 28 February 2018.

(10 marks)

**15. Read the passage below and answer the questions that follow.**

Most people in Kenya depend on agriculture as their source of income. Agriculture has also been the main source of foreign exchange for the government for many decades. Kenya has been exporting cash crops such as tea, coffee and cotton to many parts of the world. In fact, Kenya is known globally for its high quality tea and coffee. However, in the last one decade, farmers have abandoned cash crop farming and have put their land into other activities. For example, farmers have shifted to horticultural farming. This is because horticultural crops take less time to mature and fetch more money due to availability of ready market. Other farmers have shifted their **focus** to other types of farming activities such as poultry keeping.

Coffee farming was for a long time one of the major agricultural activities in Kenya. However, a research carried out recently revealed that the area under coffee cultivation has continued to decline over the years. There are various challenges facing coffee farming in Kenya. One **major**



challenge is poor soils in the coffee growing areas. The soils are exhausted and small holder farmers cannot **afford** the fertilizers required to restore the soil back to the required fertility level. Besides, bad weather has not spared coffee farming. For the last few years, weather conditions have been erratic hence negatively affecting the crop. For example, during drought, coffee berries ripen prematurely and fall off causing serious losses to farmers.

Another challenge is lack of capital especially among small-holder farmers. Some farmers lack capital to improve their farms and infrastructure. In fact, researchers say that coffee farming requires heavy capital investment in terms of inputs and labour. Shortage of labour is also a challenge especially during the harvesting season. This leads to over ripening of berries and drying up due to delays in harvesting.

In addition, diseases and pests affect coffee farming. Coffee berry disease and leaf rust **destroy** not only the crop but also lead to poor quality produce. Competition from other crops is a further challenge. It is common to find farmers who have planted other crops such as bananas and avocados alongside coffee. This makes the coffee output low. Mismanagement of co-operative societies which market coffee has also been a challenge. Besides failing to pay farmers on time, the societies have been paying very low prices thereby discouraging farmers.

For the coffee sector to regain its lost glory therefore the above challenges need to be addressed at both national and county government levels. That way, coffee will continue to benefit farmers as well as the government.

*Adapted from "The Co-operative", July, 2018.*

(a) State the meaning of the following words as used in the passage:

- (i) focus;
- (ii) afford;
- (iii) major;
- (iv) destroy.

(4 marks)

(b) Explain, according to the passage, the challenges facing coffee farming in Kenya.

(6 marks)



PART II (30 marks)

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

16. (a) List **three** forms of written communication that a manager may use to communicate with employees. (3 marks)
- (b) State **two** ways of making telephone calls effective. (2 marks)
17. (a) State **three** barriers to communicate that may be caused by a channel of transmission. (3 marks)
- (b) List **two** parts of a formal letter. (2 marks)
18. (a) List **three** natural causes of pollution of the environment. (3 marks)
- (b) List **two** effects of overpopulation in urban centres. (2 marks)
19. (a) State **three** reasons why western music is popular in Kenya. (3 marks)
- (b) List **two** reasons why people work. (2 marks)
20. (a) List **three** methods that a business may use to increase sales. (3 marks)
- (b) State **two** reasons why innovation is necessary in Kenya. (2 marks)
21. (a) List **three** methods that a business person may use to price products. (3 marks)
- (b) List **two** services that banks provide to their customers. (2 marks)
22. (a) State **three** roles of courts of law. (3 marks)
- (b) List **two** traditional musical instruments. (2 marks)

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