



# MACHINGA BOMA ZONE

2023 PRIMARY SCHOOL LEAVING CERTIFICATE OF EDUCATION MOCK EXAMINATION

## MATHEMATICS

(100 Marks)

Thursday, 23 February

Subject Number: P131

Time allowed: 2 hours

(8:00am – 10:00am)

Candidate Name: \_\_\_\_\_

(Surname First)

School Name: \_\_\_\_\_

### Instructions

- This paper contains 9 printed pages. please check**
- Write your Name and Name of your School in the Spaces provided above and your Examination Number on top of each page.
- This paper is consisting of **sections A, and B.**
- Answer all questions in **sections B** and show your working.
- The first 10 minutes are for reading the questions.
- In **Section A** encircle the letters represent right answers and in Section B write your answers on the space provided.
- In the space provided on this page tick against the question number you have answered apart from question 1to30
- Use of electronic calculator is not allowed

### IMPORTANT

- Please make sure you have written your **name** and **examination number** on the question paper in the space provided
- Hand in your question paper to the invigilator when time is called to stop write

Question Number	Tick 21 – 30 if Answer	Do not write in these columns	
1-20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

## SECTION A: (40marks)

1. How many fortnights are there in 56 days?
  - A. 2
  - B. 4
  - C. 8
  - D. 4
2. What term is given when a cost price is more than a selling price?
  - A. Discount
  - B. Marked price
  - C. Loss
  - D. Profit
3. Jane scored 19 out of 25 and Dorothy scored 14 out of 25 marks in an English test. Calculate the difference between their scores in percentage.
  - A. 20%
  - B. 5 %
  - C. 56%
  - D. 76%
4. From the product of 12 and 10, take away the quotient of 360 and 9.
  - A. 40
  - B. 120
  - C. 100
  - D. 80
5. What is the difference between MLXIX and DLIV
  - A. MDV
  - B. DVX
  - C. DXV
  - D. DIX
6. A bus left Goliati at 7:30am and reached Thyolo Boma at 10:30am. If it was travelling at an average speed of 90km/hr, what distance did it cover?
  - A. 270km
  - B. 93km
  - C. 30km
  - D. 315km
7. Calculate the pass rate if 6 learners passed out of 60 learners who sat examination at a certain school
  - A. 0.6%
  - B. 6%
  - C. 50%
  - D. 10%
8. What is 1,392,657 in words
  - A. One million three hundred and ninety two thousand six hundred and sixty seven
  - B. One million three hundred and ninety two thousand six hundred and fifty seven
  - C. Thirteen million nine hundred twenty six thousand and fifty seven
  - D. One hundred and thirty nine million two hundred and six thousand and fifty seven
9. What is the value position of the first 5 in the following number 0.05959
  - A. Hundredth
  - B. thousandth
  - C. ten thousandth
  - D. hundredth
10. Express 6 hours as a fraction of a day.
  - A.  $\frac{1}{2}$
  - B.  $\frac{1}{4}$
  - C.  $\frac{1}{3}$
  - D.  $\frac{2}{3}$

11. Which of the following is correct for the mathematical statement : the difference between  $x$  and 3 is greater than or equal to 12

- A.  $x - 3 \geq 12$
- B.  $x - 3 < 12$
- C.  $x - 3 > 12$
- D.  $x - 3 \leq 12$

12. An acute angle is an angle which is \_\_\_\_\_

- A. Equal to  $90^\circ$
- B. Greater than  $180^\circ$
- C. Less than  $90^\circ$
- D. Greater than  $90^\circ$  but less than  $180^\circ$

13. Find the least number such that when it is divided either by 10, 15 or 18 the remainder is 8.

- A. 98
- B. 90
- C. 84
- D. 128

14. Change 0.3 decimetres into kilometers.

- A. 0.03km
- B. 0.003km
- C. 300km
- D. 3000km

15. Which pair of numbers below are Prime Numbers.

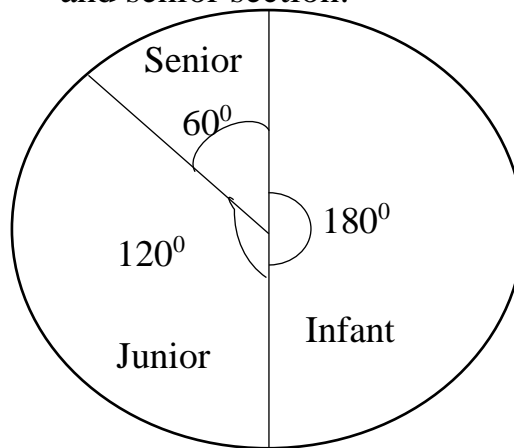
- A. 14 and 15
- B. 17 and 19
- C. 16 and 13
- D. 12 and 17

16. Express 3.05522 to 2 significant figures

- A. 3.0
- B. 3.06

- C. 3.1
- D. 3.05

17. **Figure 1** is a pie chart showing distribution of learners in infant, junior and senior section.



**Figure 1**

If the total number of learners in infant, Junior and Senior is 960, how many learners are in senior section?

- A. 160 learners
- B. 60 learners
- C. 320 learners
- D. 360 learners

18. Name two examples of quadrilaterals.

- A. Triangle and square
- B. Circle and kite
- C. Rhombus and triangle
- D. Rhombus and kite

19. What is the rule of generating a number pattern 49, 63, 77, 91?

- A. Add 7
- B. Add 14
- C. Subtract 7
- D. Subtract 14

**Table 1** Shows the charges of sending a telegram. Use it to answer question 20

Charge for internal telegram
Rate per word = K30.00

**Table 1**

MANAGER ILLOVO SUGAR BOX 45  
DWANGWA  
THIS TERM ENDS ON 7 MAY PLEASE  
SEND TRANSPORT RUTH ZATHA

20. How much did she pay for the telegram?  
A. K450.00  
B. K570.00  
C. K480.00  
D. K540.00

**SECTION B** (60 marks)

- Show all your working

21. The table below shows rates of tax on salary per month for a certain country.

Salary per month	Tax Rate
First K9000.00	0% (Tax free)
Next K10000.00	15%
Next K12000.00	25%
Next K15000.00	35%

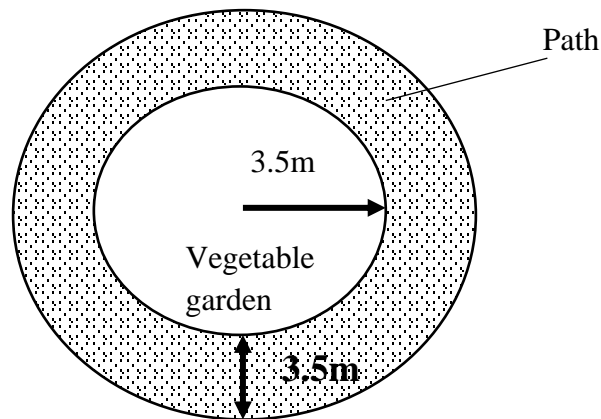
If a worker earns K30000.00 per month, Calculate the worker's monthly tax. (4 marks)

22. a. Three taps fills a tank as follows:

The first tap fills it in 18 hours, the second tap fills it in 9 hours and the third fills in 12 Hours. If a boy opens all the taps to fill the tank at the same time at 7:00am, When should he Come to close the tap the time the tank will be full? (4marks)

b. A rectangle is three times long as it is wide. If its perimeter is 56cm. calculate the width of the rectangle. Use letter b in the formula as length and width. (4marks)

23. a. **Figure 2** shows a circular vegetable garden with radius 3.5m. the garden is surrounded by a path which is 3.5 metres wide. Find the area of the path. Take  $\pi = 227$  (4marks)



**Figure 2**

b. Fire destroyed 96% of books in Library. If 200 books were not burnt. Calculate the original number of books in the library. (4marks)

24. Work out the household bill for the following items 12kg sugar at K125 per kg, 912kg flour at K140 per kg, 5 used carpets at K2,700 each, 6kg rice at K160 per kg and 370 pencils at K60 per unit. (6marks)

25. a. A farmer feeds 14 cows for 42 days on a field of pasture. How long can he feed the cows. If he puts 7 more cows on the field of pasture? (4marks)

b. A doctor recorded temperatures of a patient at different intervals as follows 36.0 , 36.2 , 37.7 and 38.1 . Calculate the mean temperature of the patient (3 marks)

26. a. Using a ruler and a protractor, construct a rhombus **PQRS** in which **SR** = 5cm, angle **PSR** =  $50^\circ$  and angle **SRQ** =  $130^\circ$ . (5marks)

27. Chisomo is twice as old as Mphatso. If the sum of their ages is 30 years. Find the age of Mphatso. (3marks)

28. a. Mr. Mbonekera bought a car at a Hire purchase. He was asked to pay a deposit of K400, 000.00. The cost of the car was K7, 600, 000.00. The balance was to be paid in two years every month equally. How much did Mr Mbonekera pay per month? (3marks)

b. The average mass of 13 bags of maize is 52.2kg. If 3 bags are sold, the average mass of the remaining bags is 52.7kg. Calculate the total mass of the three bags. (4 marks)

29. (a). A dam has its length measure 25m the width measures 20m and its height is 12m what is the volume of the dam? (2marks)

(b). Calculate the capacity of the dam in (29a) in Litres (4marks)



30. Blessings started business on 1st July 2020 with K52 000 in the bank. During the month Blessings's transactions were as follow:

2 July withdrew K40 000

7 July bought maize K30 000 cash

10 July sold maize K33 000 cash

15 July banked K35 000

(a) Prepare Blessings's cask book. (6 marks)

(b.) What was Blessings's capital on 1st August? (1 mark)

**END OF QUESTION PAPER**

**NB: This paper contains 9 printed pages**