Candidate's Examination Number_____

SMZ

ZANZIBAR EXAMINATIONS COUNCIL

FORM ONE ENTRANCE EXAMINATION

130 MATHEMATICS

TIME: 2.30 HOURS TUESDAY 3rd DECEMBER, 2019 a.m.

1. **This paper consists of two (2) sections A and B**
2. **Answer ALL questions in section A and any FOUR (4) questions in section B.**
3. **Write your answers in the spaces provided.**
4. **Cellular phone and calculator are not allowed in the examination room.**
5. **Use blue or black pen in writing.**
6. **Write your examination number on each page.**

FOR EXAMINER'S USE ONLY		
QUESTION NUMBER	**MARKS**	**SIGNATURE**
1.		
2.		
3		
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14.		
15.		
16.		
TOTAL		

This paper consists of 16 printed pages

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SECTION A: (60 Marks)
Answer ALL questions in this section

1. Find the perimeter of rectangular plot with sides of $55m \; and \; 40m$.

2. a) Define decimal number.

b) Express $\frac{14}{25}$ as a decimals.

3. a) Define the following terms on number.

i) Even number

ii) Odd number

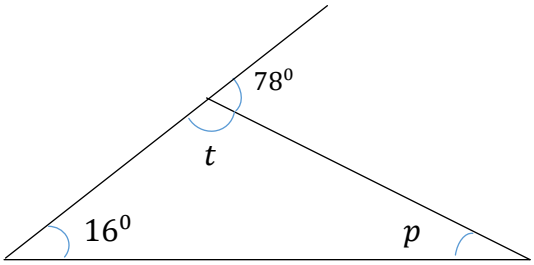
iii) Whole number

b) Compute $1111_2 + 111_2$

4. The circumference of circular track is 440m. Find the diameter of this track.

$$\left[Take\ \pi = \frac{22}{7}\right]$$

5. Find the value of the angle t and p in the following figure.



6. What is the side of square whose area is equal to that triangle of base 18cm and height 16cm?

7. Simplify $5x + (5x + 14y) + (2x - 6y)$.

8. Juma and Ali shared sh. 395 in the ratio of $2:3$. How much did each get?

9. Three men weigh $72kg215g,\ 69kg750g\ and\ 65kg500g$. What is their total weight?

10. a) I thought of a number, double it and added 3 to it. If my answer was 17. What number did I think of?

b) If $m = 2 \; and \; n = 1,$ find the value of: $2(3m - 2n)$

SECTION B: (40 marks)
Answer ANY four (4) questions in this section

11. a) Write the formula of loss made and profit made.

b) A bag of wheat flour was bought at sh. 300,000 and sold at sh. 350,000. Calculate the percentage profit.

12. a) Find the LCM and HCF of $72 \text{ and } 108$.

b) Find the value of x if $x^3 = 3375$

13. a) Convert $\frac{33}{5}$ into a mixed number.

b) The following are the list of the value of angles.

$34^0, 183^0, 90^0, 245^0, 150^0, 286^0, 180^0, 215^0, 78^0, 186^0, 300^0$

Fill the table with value of respective angles.

NAME OF ANGLE	VALUE OF ANGLE
Obtuse angles	
Acute angles	
Reflex angles	
Right angles	
Straight lines	

14. a) Calculate the area of a sphere whose radius is $20cm$.

b) At what rate will the principle of sh**.** 500,000 yield an interest of sh. 100,000 in 10 years at simple interest rate?

15. a) A rectangular container $60cm$ long and $40cm$ wide can hold 72 liters of water when full. What is the height of the container?

b) What is the average (mean) of the set of the data

$$20, 31, 19, 50, 18, 36, 70, 24, 35, 40$$

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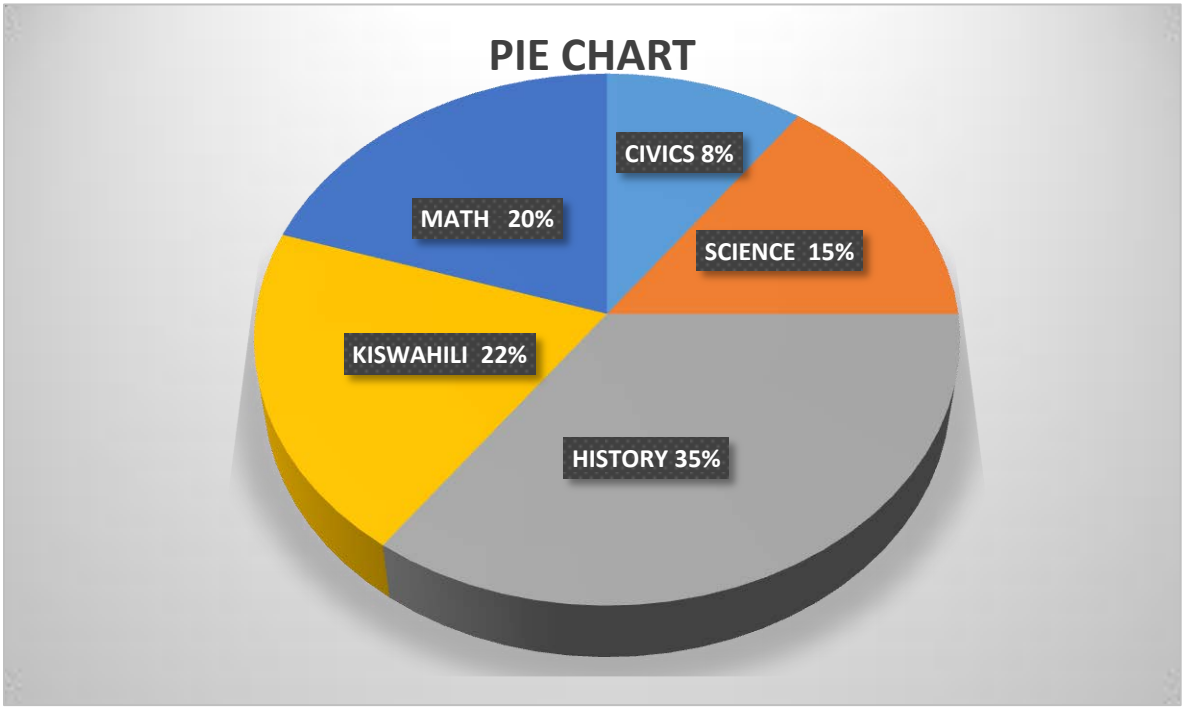
16. a) The following pie chart shows the types of books in the library at a Primary school :



a) Find the value of angle represents History books

b) Find the value of angles represents Kiswahili books

c) Find the value of angles represents Mathematics books

d) Find the sum of angles represent History, Kiswahili and Mathematics

b) Find the number of science books, if the total number of books is 200.

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ROUGH WORK