Candidate`s Examination Number_____

SMZ

ZANZIBAR EXAMINATIONS COUNCIL

FORM ONE ENTRANCE EXAMINATION

130   **MATHEMATICS**

TIME: 2.30 HOURS   **MONDAY 27th NOVEMBER,2017 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.   Write your examination number on each page.
5.   Cellular phones are not allowed in the examination room.

FOR EXAMINER'S USE ONLY		
QUESTION NUMBER	MARKS	SIGNATURE
1.		
2.		
3		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
TOTAL		

This paper consists of 23 printed pages

SECTION A: (60 Marks)

Answer ALL questions in this section

1. a)   Find the LCM and HCF of 24 and 36.

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   b)   Evaluate $\sqrt[3]{216}$.

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2. a)   Express 1.25 as a fraction.

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b) In calendar of any year there is only one month likely to have different number of days, name this month.

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_____

3. a) Given that 1 Kenya shillings is equal to 19 Tanzania shillings. Convert 34,200 Tanzania shillings into Kenya shillings.
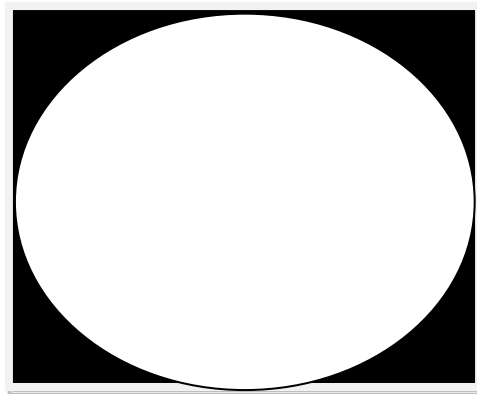
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b) Consider the figure below; find the area of shaded region.

26 cm

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4. a) Husna thought of a certain number and subtract with 4, the result was 12. What is the number?

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5. a) If p is directly proportional to q and $p = 70$ when $q = 5$, find p when $q = 20$.

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b) Find the product when 450 is multiplied by 25.

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6. a) Write the following number in numerals

   Five million, three hundred and twenty one thousand, five hundred and thirty Six.

_____

_____

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_____

b) List the prime number between 90 and 100.

_____

7. a)Find the prime factors of 100

_____

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_____

b) Draw isosceles triangle whose equal sides are of the length 4cm and the   base is of the length 7cm.

8. a)$661.8 + 566.8$

_____

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b) Evaluate $0.64 \div 0.2$

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9. a)Convert $(10121)_3$ to base8

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b) $If \ C:D = 10:15$ .Find the value of D when

$C = 100.$

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10. a)Simplify $\frac{8x}{21y} \div \frac{32yz}{14y}$

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b) Solve the algebraic equation $2x + 34 = -24 + 5x$

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SECTION B: (40 marks)

Answer ANY four (4) questions in this section

11.   a) What is the other name of average?

_____

   b) In national campaign for fighting AIDS, people volunteered to the test for
      HIV.Some of the people living with HIV in seven (7) districts are distributed
      as follows: 4,367 people in district A, 2,307 people in district B, 1,268 people
      in district C, 3,311 people in district D, 1,112 people in district E, 4,367
      peoplein district F and 4,367 people in district G. What is the mean of the
      people livingwith HIV?

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   12.   The following table shows how a certain pupil spends his time per day.

Activity	Sleeping	Lesson at school	Home work	Sport and game	Leisure
Number of hours	7	7	3	3	4

a)   Calculate the number of hours into degrees.

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b)   Draw the pie chart represents this information.

13.   a) List down the types of angles

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b)   i)   Find the value of x^0 in the figure below

$5x^0$

$2x^0$ $3x^0$

_____

_____

_____

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_____

_____
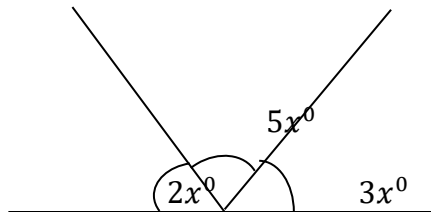
14. a) Define the following terms.

   i. Profit

_____

_____

_____

   ii. Loss

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b)   i)   Asha bought a book

for 10,000 shillings and sold it for 6,000 shillings. Find the percentage loss.

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   ii)   A hardware dealers bought a white cement for 84,000 shillings and sold it at a profit of 10%. Find his profit.

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15. a) i) List down three (3) types of fraction.

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ii) Write $\frac{12}{9}$ as mixed number.

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b) Find the value of $\frac{2}{5} \times \frac{1}{7} \div \frac{5}{9} + \frac{3}{4}\left(\frac{1}{7} - \frac{2}{7}\right)$

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16. a) Define the term interest.

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b) Maryam got an interest of $shillings$ 300,000 after depositing a certain amount of money at interest rate of 5% per annum. What was the total money in her bank account after 10 $years$?

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ROUGH WORK