

PRESIDENT'S OFFICE

REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

MULEBA DISTRICT COUNCIL

FORM ONE JOINT TERMINAL EXAMINATION

041 BASIC MATHEMATICS

TIME: 2: 30 HRS

YEAR: MAY 2024

INSTRUCTIONS:

1. This paper consists of total of ten (10) questions
 2. Answer all questions
 3. All necessary working and answers for each question done must be shown clearly.
 4. Write your name in every page of your answer sheet
 5. Calculators and cellular phones are not allowed in the examination room.
1. (a) (i) Write 480209 in words;
(ii) Evaluate $13 - 2 \times 3 + 14 \div (2 + 5)$
- (b) Write 642217 in order of the
- (i) Smallest possible number
 - (ii) Largest possible number
2. (a) (i) Find the sum of LCM and GCF of 16, 18 and 32
- (b) What is greater between $\frac{3}{7}$ and $\frac{3}{8}$
- (c) Given that $Z = 400.0327$;
- (i) Write Z correct of our (4) significant figures;
 - (ii) Write Z correct to two (2) decimal places;
3. (a) (i) Express 0.23 a separation of two integers;
- (ii) How many kilograms are there in a milligram?

- (b)(i) Simplify the expression $12mn \div 3 - 3nmx$;
- (ii) An even number is M. What is the next even number?
4. (a) i. Three angles of a triangle are marked $2x$, $x + 20^\circ$ and $x - 40^\circ$. Find the value of X;
- ii. If X and Y are complementary angles such that X is 18 less than Y. Determine the angles:
- (b) Given that the interior angles of a triangle are in the ratio of 3:4:5 Find;
- (i) The smallest angle;
- (ii) The difference between the largest and the smallest angle;
5. (a) Nine best friends share 52 sweets equally. How many sweets does each friend get and how many are left over?
- (b) A farmer uses $\frac{1}{3}$ of his land for growing bananas, $\frac{1}{5}$ for pineapples, $\frac{1}{6}$ for mangoes and the remaining portion of his land is used for growing oranges. What fraction of his land is used for growing oranges?
6. (a) A lorry is filled with 7.1 tons of sand. During the journey, 210 kg of sand either falls off or blows away. What mass of sand in tones is delivered at the end of the journey?
- (b) Juma measured the height of his friend Moses by using tape measure. He found that his friend was 167.5cm high. Approximate this height:
- (i) To 1 significant figure.
- (ii) To the nearest ten.
7. (a) Simplify $\frac{34 \times 17.58}{542 \times 9.28}$ and express your answer in four significant figures.
- (b) Jenk and Jemry are riding on a circular path. Jenk completes a round in 24 minutes whereas Jemry completes a round in 36 minutes. If they started at the same place and time and go in the same direction, after how many minutes will they meet again at the starting point?
8. (a) A piece of length 7.42m is cut from a string that is 13.5M long. If the remaining part of the string is divided into equal pieces of length 32cm. How many pieces are there?

- (b) (i) Show on a number line: $-2 - 5$;
- (ii) Find the solution set of inequality $|4x - 9| \leq 3$ and graph it on a number line;
9. (a) A car which its buying price was Tsh. 12,500,000/= was sold at a loss of 20 percent. **Find;**
- (i) The loss made;
- (ii) The selling price
- (b) Find the period of time for Tsh. 1,000,000/= to reach Tshs. 1,200,000/= in a bank with interest rate of 5% calculated as a simple interest.
10. (a) A woman used $\frac{1}{4}$ of her money to buy sugar and $\frac{1}{3}$ of the remaining to buy soap. If she remained with Tshs. 60,000/= find;
- (i) The amount of money she had at the beginning;
- (ii) The amount of money she used to buy sugar;
- (b) In the figure below $\angle RTS = 80^\circ$ and $\overline{TP}$ – bisects $\angle QPS$, $PT = PS$. Find the degree measure of angle X and Y;