

**INTERSECONDARY SCHOOLS EXAMINATION SERIES**  
**ISESE**  
**FORM TWO OPENING TEST**  
**BASIC MATHEMATICS**

**TIME 2:30 HRS**

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**INSTRUCTIONS**

1. This paper consists of a total **ten (10) compulsory** questions
2. Show your work clearly
3. All writing must be in **blue** or **black** ink, except drawings which should be in **pencil**
4. All communication devices, programmable calculators and any unauthorized materials are **not** allowed in the examination room

FOR EXAMINER'S USE ONLY		
QUESTION NUMBER	SCORE	EXAMINER'S INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
TOTAL		

1. a) Write 5460783 in
  - i) Expanded form
  - ii) Words
  - iii) Four significant figures
 b) Given  $x = 0.\dot{3}$ . and  $y = 0.8\dot{3}$ . find the product of x and y in the form a/b
2. Three bells ring intervals of 20 minutes, 30 minutes and 40 minutes. If they start ringing together at 7:30 a.m
  - a) after how long will they all ring together again?
  - b) at what time will this be?
3. a) Solve the following simultaneously equation by substitution method.
 
$$\frac{3}{x} + 4y = 1$$

$$x - \frac{1}{7y} = 2$$
 b) Solve for X If  $\frac{1}{2}X + \frac{x-1}{3} = \frac{x+6}{4}$
4. a) Convert 150,00mm to kilometers
  - b) Give the time 6:30 a.m. in 24-hour clock rotation
5. A fruit seller bought some oranges for Tshs. 2400. He noted that, 12 of the oranges were spoilt by insect and thrown away. The rest were offered for sale at 3 for Tshs. 100.
  - a) How many oranges did he buy if he made a profit of  $16\frac{2}{3}\%$  when all the oranges were sold?
  - b) How much money did he get?
  - c) How many oranges were offered for sale?
6. a) Find the sum of the interior angels of a heptagon
  - b) Find two numbers such that their sum is 108 and their difference is 54
7. a) Solve the inequality  $9 - 4x \geq 17$  and represent the solution on the number line
  - b) Find the circumference of a circle whose radius is 20cm. (Take  $\pi = 3.14$ )
8. a) A metal is composed of copper and zinc in the ratio 3:2 by volume. Find the volume of a piece of the metal which contains  $42\text{cm}^3$  of copper
  - b) A person borrows Tshs, 4,000/= for a period of 6 years at 20% simple interest per annum. Calculate the total amount to be repaid

9. A house girl was employed under a condition that she would be paid Tsh 635 for the day she went to work and Tsh 275 for the day she did not go to work. At the end of the month of 30 days she was paid Tsh 17610 only. Find the number of days she went to work
10. The ratio of the ages of a father and his son now is 8:3. If ten years ago, the ratio of their ages were 6:1, find their present ages.

**U.B.N COOPERATION O-LEVEL EXAMINATION SERIES 2025**  
**TIME TABLE FOR ALL SUBJECTS**  
**FORM TWO AND FORM FOUR**  
**JANUARY SERIES**

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ALL SUBJECTS	DATE	TIME
SERIES – 01	20 <sup>th</sup> January 2025	03:00 – 6:00 pm
SERIES – 02	27 <sup>th</sup> January 2025	03:00 – 6:00 pm

**CONTENTS COVERED**

**1. SERIES FORM TWO**

**(ALL TOPICS IN FORM ONE AND ONLY ONE TOPIC IN FORM TWO)**

**2. FORM FOUR**

**(ALL TOPICS IN FORM ONE, FORM TWO, FORM THREE AND ONLY ONE TOPIC IN FORM FOUR)**

**ADA : FORM TWO 15,000 MUHULA MZIMA**

**: FORM FOUR 15,000 MUHULA MZIMA**

**OFA : UKIFANYA MALIPO YA SERIES KABLA YA TAREHE 13 JANUARY**

**MALIPO NI TSH 10,000 KWA KILA KIDATO**

**NB : \*\*\*MWISHO WA MALIPO NI TAREHE 20/01/2025**

**\*\*\* ADA ZA MALIPO YA MUHULA HUPANDA KILA DEADLINE**

**INAPOVUKA HIVYO LIPIA MAPEMA KUEPUKA GHARAMA KUBWA  
BAADAE**

**MALIPO : 5595220 LIPA NAMBA VODA JINA U.B.N ACADEMIC CENTRE**

**FOR MORE INFO**

**CALL US : 0624 254 757**

**U.B.N COOPERATION  
O-LEVEL MONTHLY TEST 2025  
FORM TWO AND FORM FOUR**

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**OFA OFA**

**U.B.N COOPERATION TUNATOA OFA MAALUM YA KUJIUNGA NA GROUP LETU LA “U.B.N COOPERATION” KWA WAKUU WA SHULE NA WATAALUMA KWA TSH 100,000/= KWA KIDATO KIMOJA AMBAPO UTAPATA MITIHANI YA KILA MWEZI (MONTHLY TEST NA MARKING SCHEMES ZAKE) KWA MASOMO YOTE NDANI YA MIEZI SITA (MWEZI JANUARI – JUNE). OFA HII NI KWA KIDATO CHA PILI NA CHA NNE TUU. MWISHO WA KUJIUNGA NA OFA HII NI TAREHE 15/01/2025**

**KWA MAWASILIANO TUCHEKI KWENYE NAMBA 0624 254 757 WHATSAPP TU**