OUTREACH SCHOOLS EXAMINATIONS BOARD
P. 7 EXAMINATION SET 8 ,2023
Mathematics.
Time allowed 2hrs:15mins

INDEX NUMBER

NAME: _____

Signature: _____

Stream   _____

Date   _____

A	
B	
TOTAL	

Read the following instructions carefully:

1.   **This paper is made up of section A and B.**

2.   **Section A has 20 short answer questions (40 marks).**

3.   **Section B has 12 questions (60 marks).**

4.   **All answers to both section A and B must be written in the spaces provided.**

5.   **All answers must be written in blue ink and diagrams should be drawn in pencil.**

6.   **Any handwriting that cannot easily be read will lead to loss of marks.**

7.   **Unnecessary alteration of work may lead to loss of marks.**

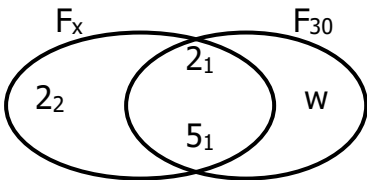8.   **No calculators are allowed in the examination room.**

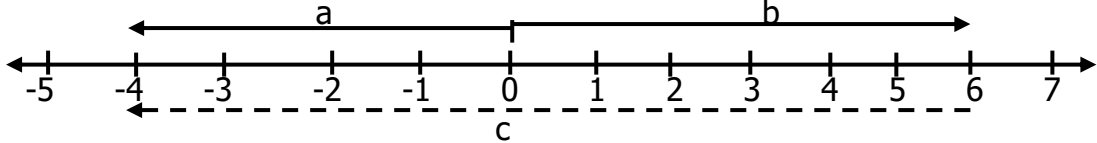| TEACHER'S COMMENT	
SIGNATURE	
Date:	

SECTION A:40 MARKS

Questions 1 to 20 carry two marks each

1.	Add: 363 + 37	2.	Simplify: $3k - 2y - k + 4y$
3.	Arrange -4, 3, 0, -2, 1 in ascending order.	4.	Find the LCM of 9 and 12.
5.	The area of a triangle is 36m^2. If its base is 6m, find its height.	6.	What number has been expanded to give $(5 \times 10^2) + (4 \times 10^0) + (7 \times 10^{-2})$?
7.	Convert 1101_{two} to base ten.	8.	$^2/_3$ of Oumar's salary is sh.600,00. Find his total salary.
9.	Round off 79.63 to the nearest whole number.	10.	If a = -6 and b = 5, find the value of $a^2 + b$

11.	Using a pair of compasses, ruler and a pencil, construct an angle of 120^0.	12.	Solve: $9 - 3y = 30$
13.	What is 25% of 1800 mangoes?	14.	Find the sum of the next two numbers in the sequence; 2, 3, 5, 7, _____, _____
15.	Write XLIX in words.	16.	The cost of 3 books is sh.2400. what is the cost of 10 similar books?
17.	The average of 5, 6 and 3 is 7. Find the value of x.	18.	Work out: $2 - 3 =$ _____ (mod 6)
19.	Using distributive property, work out: $(34 \times 8) + (66 \times 8)$	20.	How many elements are in a set with 127 proper subsets?

SECTION B: (60 MARKS)

21.	a) Simplify: $^2/_3 - ¼ + ^1/_3$ (2mks)
	b) Work out: $\dfrac{0.12 \times 0.8}{0.2 \times 0.4}$ (3mks)
22.	Ruth went shopping and bought the following items. 2kg of meat at sh.8000 @kg 1 ½ kg of sugar at sh.4000 per kg 3 bars of soap at sh.2200 each bar a) What was her expenditure? (4mks)
	b) If she remained with sh.1400, how much did she have before? (1mk)

23. In trust Primary School, there are 420 pupils and of these, $^3/_7$ are boys.
   a) What fraction are girls?   (2mks)

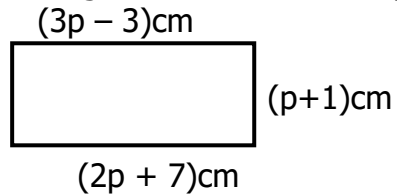   b) How many more girls are there in the school than boys?   (3mks)

24.	Study the Venn diagram below and answer the questions that follow. F_x F_{30} 2_1 2_2 w 5_1 a) Find the GCF of x and 30. (2mks) b) Work out the LCM of x and 30. (3mks)
25.	Joan scored as follows: 40, 70, 50, 82, 48, 70 a) Work out the median mark. (2mks) b) Calculate the mean mark. (3mks)
26.	Study the number line below and answer the questions that follow; a b -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 c a) Identify the integers represented by letter; i) a _____

ii) b _____

iii) c _____

b) Write the mathematical statement shown on the above number line.   (1mk)

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27. The figure below is a rectangle. Use it to answer questions that follow.

(3p − 3)cm

(p+1)cm

(2p + 7)cm

a) Solve for p.   (2mks)
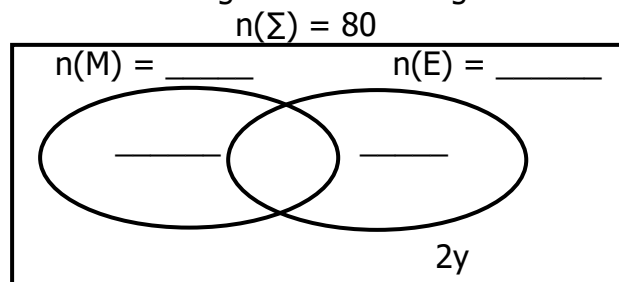
b) Calculate the area of the figure above.   (3mks)

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28. In a class of 80 pupils, 37 like maths (M), 31 like English (E), 8 pupils like both subjects and 2y pupils like any of the two.

a) Complete the Venn diagram below using the above information. (3mks)

n(Σ) = 80

n(M) = _____   n(E) = _____

_____   _____

2y

b) Find the value of y.   (3mks)

29.	Opolot shared sh.120,000 among his three children Tim, tam and Tom in the ratio of 3:5:4 respectively. a) How much money did each get? (4mks) b) How much more money did Tam get than Tim? (1mk)
30.	a) Using a ruler, a pencil and a pair of compasses, construct a regular quadrilateral ABCD in a circle of radius 4cm. (4mks)

	b) Measure line AB 8 (1mk)
31.	a) A man bought 25 apples at sh.800 each. At what price must he sell each apple to realize a 20% again? (4mks) b) Express 22½% as a decimal (1mk)
32.	A tank was 2/3 full of water. When ¼ of the water in the tank was drawn, 2,500 litres remained. Find the capacity of the tank when full. (5mks)

End