

# LUGAZI DIOCESE MOCK EXAMINATION

## 2023

### PRIMARY SEVEN MATHEMATICS

*Time: 2 Hours 30 Minutes*

Index No. \_\_\_\_\_

SCHOOL NUMBER					PERSONAL NO.		

Candidate's Name: .....

Candidate's Signature: .....

School Name: .....

**Do not open this booklet until you are told to do so.**

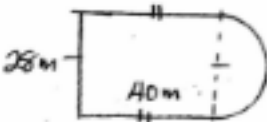
Read the following instruction carefully:

1. The paper has two Sections: **A** and **B**
2. Section **A** has 20 short questions (40 marks)
3. Section **B** has 12 questions (60 marks)
4. Answer **All** questions. All answers to both Sections **A** and **B** must be written in spaces provided.
5. All answers must be clearly written using blue ball point Pen or ink. Only diagrams should be drawn in pencils.
6. Unnecessary changes of work may lead to loss of marks.
7. Do not fill in the boxes indicated "For examiner's use only".

FOR EXAMINER'S USE ONLY		
Qn. No	MARKS	SIGN
1-10		
11-20		
21-22		
23-24		
25-26		
27-28		
29-30		
31-32		
TOTAL		

**Turn Over**

SECTION A (40 MKS)

1. Work out:  $12 \div 2$
2. Write XCIX in Hindu Arabic Numerals.
3. Simplify:  $2x + 3x + 7x$
4. Work out:  $\frac{3}{4} \div \frac{1}{2}$
5. Work out the square of the next number in the sequence 128, 64, 32, 16, 8, \_\_\_\_\_
6. Calculate the perimeter of the figure below. (Use  $\pi = \frac{22}{7}$ )  

7. A birthday party started at 4:30pm and lasted  $2\frac{1}{4}$  hrs. At what time did the party end?

8. Set  $A = \{\text{Vowel Letters}\}$   
Find  $n(A)$

9. The area of a square garden is 1600 square metres. Calculate its perimeter

10. Without dividing, show which of the numbers 791 and 3438 is divisible by 6.

11. Arrange the following integers in descending order  $-7, +4, 0, 1^{-}3, +2, +6$

12. Using a ruler, a pencil and a pair of compasses only, drop a perpendicular from point  $P$  to meet line segment  $XY$  at point  $R$ .

$P$

•



13. Convert  $123_{\text{base } 6}$  to base ten.

4. Work out:  $2\frac{3}{4} + 1\frac{1}{4}$

5. The scientific notation of a number is  $6.5 \times 10^{-3}$   
Find the number.

6. A teacher wrote letters on cards as shown below.

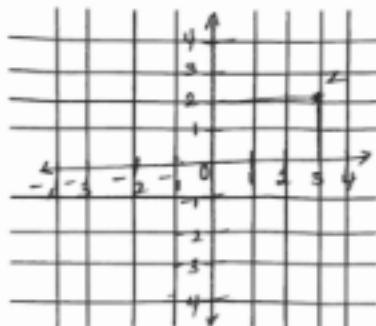
M	A	T	H	E	M	A	T	I	C	I	A	N
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He placed them in a container and then told a pupil to select a card at random. What is the probability that a pupil selected a card with letter "A"?

17. Simplify:  $-5 - -8$

18. Martin ran a distance of 6km in 45 minutes. What was his speed in kilometres per hour?

19. Study the co-ordinate graph below and use it to answer the questions that follow.



- (a) Write the coordinates of point Z.

20. Write 99,040 in words.

### SECTION B (60 MARK)

Answer all questions in this section For each question marks are indicated in the brackets.

21. Pupils did a test and scored as shown in the table below.

Marks	50	K	45	80
No. of Pupils	2	6	3	4

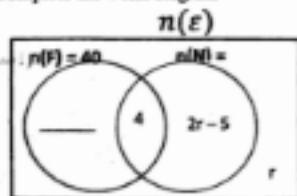
- (a) How many pupils did the test? (1mk)

- (b) Find the value of k, if the mean mark was 61. (2mks)

- (c) What was the range of the marks? (1mk)

22. The diagram below shows the number of players in a school team who participated in Football (F), Netball (N) and other games.

- (a) Complete the Venn diagram (1mk)



(b) If 437 players did not participate in football, find the value of  $r$ .

(2mks)

(c) If a player is selected at random to be a team captain, what is the probability that the one selected participated in Netball?

(2mks)

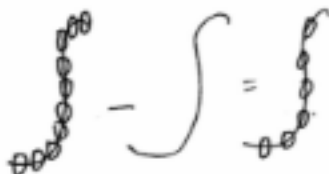
23. a) Fill in the missing number in the box and then write it in words

(2mks)

$$\boxed{\phantom{000}} + 123 = 2022$$

b) Draw the missing beads on the second thread to complete the subtraction statement shown below.

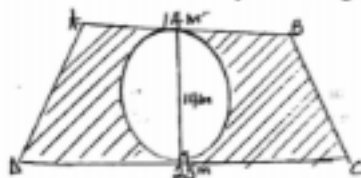
(1mk)



c) Write the subtraction statement shown by the threads above.

(1mk)

24. Find the area of the shaded part in the diagram below (Use  $\pi = \frac{22}{7}$ ) (5mks)



25. Three pupils Antonio, Mada, Padre shared money in the ratio 4:6:9 respectively. Padre received Shs. 24,300. How much money did the three pupils share altogether? (3mks)

- b) How much more money did Mada get than Antonio? (2mks)

26. Mr. Ssewajje bought the following items from a supermarket.

- 2 dozens of eggs at Shs. 200 each egg.
- 2 grosses of exercise books at Shs. 150 each book.
- 2 scores of 20 pencils each at Shs. 600 per score

- (a) How much money did Mr. Ssewajje spend on all items? (5mks)

- (b) If Mr. Saewajje was given change of Shs. 800. How much money did he have at first? (1mrk)

27. a) Using a ruler, a pencil and a pair of compasses only, construct a quadrilateral WXYZ where line segment  $WX = 7.5\text{cm}$ , angle  $XWZ = \angle WZY = 90^\circ$ , line  $WZ = 4\text{cm}$  and angle  $WXY = 60^\circ$ .

- b) Measure the length XY \_\_\_\_\_ cm (1mrk)

28. The table below shows the arrival and departure time for a bus that travels from Kampala to Hoima daily.

TOWN	ARRIVAL TIME	DEPARTURE
KAMPALA		7:30AM
BUSHENYI	8:10AM	8:30AM
BUKOMERO	9:30AM	9:45AM
KIBOGA	10:15AM	10:40AM
HOIMA	11:40AM	

- (a) At what time does the bus leave Kampala? (1mrk)
- (b) How long does the bus stay at Bukomero? (1mrk)
- (c) How long does the bus take to travel from Bukomero to Kiboga? (1mrk)



- (d) Find the total time taken by the bus to travel from Kampala to Hoima (1mk)

29. Martin's car uses 8 litres of petrol for every 50km.

- (a) How much petrol does he need for a journey of 325km? (2mrks)

- (b) If one litre of petrol costs Shs. 2900. How much money will he spend on petrol, needed to run the car for 1½ hours at a speed of 50km/hr? (3mrks)

30. Below is a base three numeration. Study and answer the questions that follow,



- (a) Write the base three numeral above. (2mrks)

- b) Change the above base three numeral to decimal (2mrks)

31. A water tank with a capacity of 4,800 litres was  $\frac{1}{6}$  full. Some of the water was sold using 20 litre jerrycans at Shs. 200 each. After the sell  $\frac{1}{8}$  of it remained.

(a) Find the amount of water which was sold

(3marks)

(b) Calculate the amount of money earned from the sale

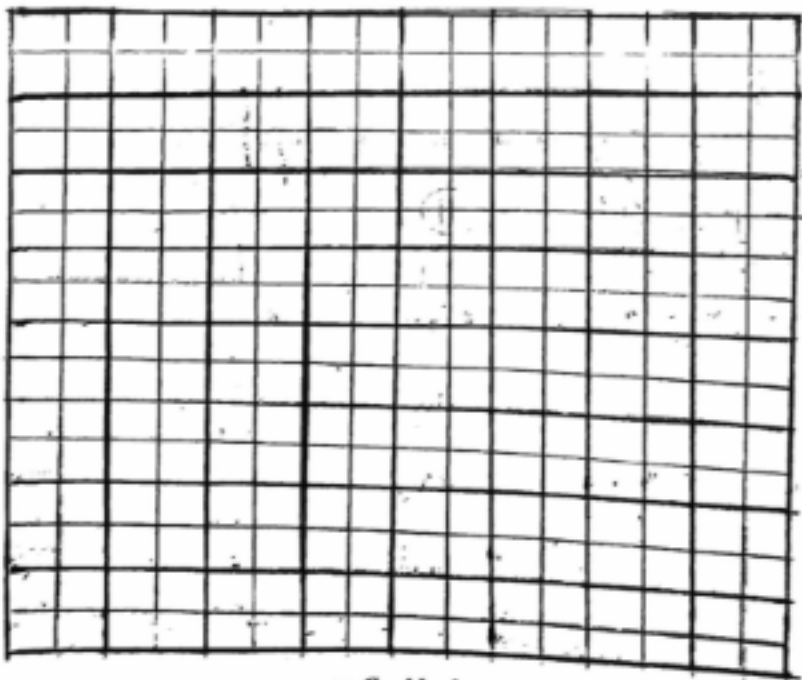
(2marks)

32. A bus driver left Kampala at 8:00am for Kiseo Town. He travelled at a speed of 60km/hr for 5 hours to Ntungamo Town. He rested for one hour at Ntungamo Town and then drove at 90km/hr for 2 hours until he reached Kiseo Town. Draw a travel graph to show this information.

Vertical scale: One small square represents 30km

Horizontal scale: One small square represents 30 minutes

(5marks)



— Good Luck —