ANKOLE DIOCESE EXAMINATIONS SECRETARIAT

PRE-MOCK EXAMINATION
2024

MATHEMATICS

TIME ALLOWED: 2 HOURS 30 MINUTES.

INDEX NO.

EMIS NO	Personal No.

Candidate's Name:.. Signature:.......................

School Name:.. .... EMIS No.........................

Archdeaconry...

Read the following instructions carefully

1. This paper has **two** Sections: **A** and **B**. Section A has **20** questions and Section B has **12** questions.

2. All the working for both section A and B must be shown in the spaces provided. No pieces of paper should be provided for rough work.

3. All working must be done in **blue or black** ball point pen or ink and **NOT** in pencil. Only diagrams and Graph work may be done in pencil.

4. Unnecessary changes of work may **lead to loss of marks.**

5. Any handwriting that cannot be easily read, may **lead to loss of marks.**

6. The use of electronic calculators and Mathematical tables is not allowed.

7. Do not fill anything in the box indicated **"for Examiner's use only"** and those inside the paper.

FOR EXAMINERS' USE ONLY		
QN NO.	MARK	Examiner's Sign
1-5		
6-10		
11-15		
16-20		
21-22		
23-24		
25-26		
27-28		
29-30		
31-32		
TOTAL		

TURN OVER

1. Add: H   T   O   *(2 mks)*

        6   3

    +   4   5

2. Write 149 in Roman numerals.   *(2 mks)*

3. In the Venn diagram below. Find $\cap(B\cap P)'$ *(2 mks)*
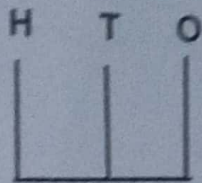
$\cap$(B) $\cap$(P)

11   9   6

3
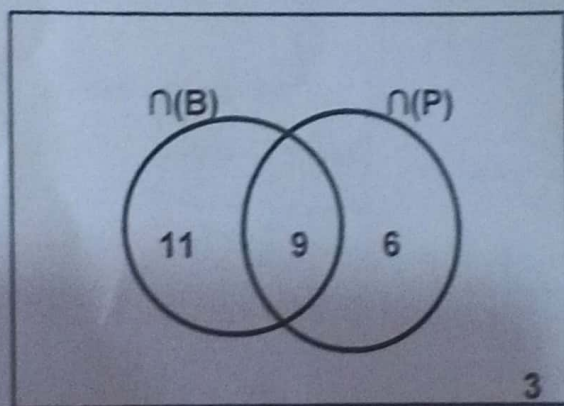
4. Simplify ⁻3 - ⁻8 (2 mks)

5. Show $(4 \times 10^2) + (2 \times 10^1) + (3 \times 10^0)$ on the abacus below. (2 mks)

H   T   O

6. Use distributive property to work out.

$$\left(\frac{3}{7} \times 1000\right) - \left(265 \times \frac{3}{7}\right)$$

7. Work out $9^4 \div 9^2$ (2 mks)

Turn over

8. The Uganda National population and Housing census programme started today on Tuesday 30th April, 2024 and lasted for 20 days. On which day did the programme end ? (2 mks)

9. Find the next number in the sequence.

29, 27, 24, 19, 12, _____ (2 mks)

10. After covering ¼ of his journey. Kennedy still had 45 km to cover. How long was his journey? (2 mks)

4

11. Solve for P $2P^3 = 54$ (2 mks)
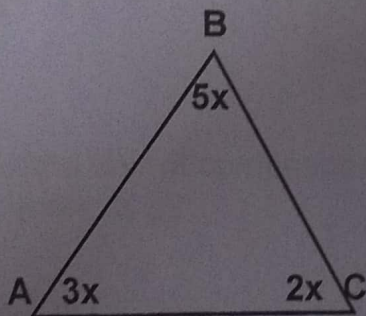
12. Work out the circumference of a circular plate of radius 50mm.
    (Take π as 3.14)   (2 mks)

13. Find the size of angle **ABC** in degrees.   (2 mks)

14. A car covered 144 km in 4 hours. Find its average speed in metres per second. **(2 mks)**

15. Given that a = 3, b = 10 and c = ⁻2. Find the value of ab^c. **(2 mks)**

16. Work out: 1 ÷ 5 = ___(finite 6) **(2 mks)**

17. A football team M can win, draw or lose a match.
    Find the probability that team M will either win or draw
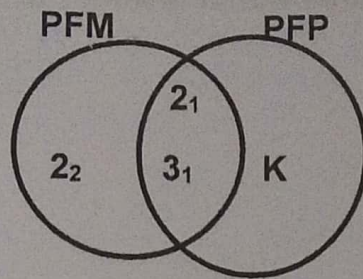   a match.   (2 mks)

18. The marked price of an article is sh.40000, a customer paid
    sh.37000 after being given a discount. Calculate the discount
    percentage allowed?   (2 mks)

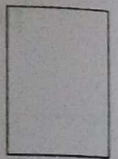19. Using a pair of compasses, a ruler and a pencil only construct
    an angle at 30^0.

20. The figure below shows the prime factors of m and p.

PFM   PFP

Given that the LCM of P and M is 60. Find the value of K.   (2 mks)

SECTION B (60 MARKS)

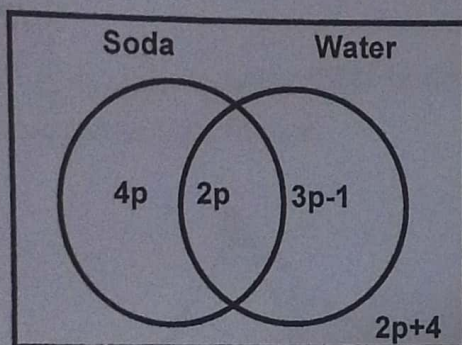21.a) What is the place value of 4 in the numeral 431$_{five}$.   (01 mk)

8

b) Work out: 1 1 0 two

　　　　　X　1 1 two

c) Write 8064 in standard form.　　　　　　　　*(2 mks)*

22. The Venn diagram below shows guests who attended a party.
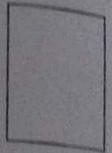　　 Use it carefully to answer questions that follow.

a) Given that 34 guests never took water. Find the value of **P**.　　(2 mks)
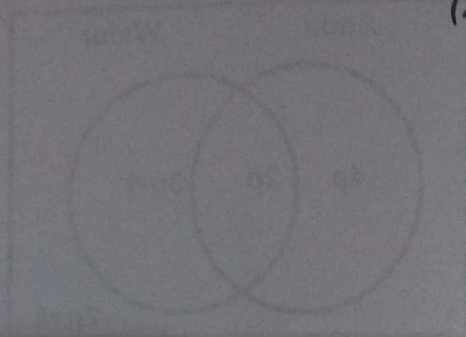
b) How many guests took only one type of a drink?   (2 mks)

23.a) A cow produces 3500 ml of milk daily. How many litres of milk does
the cow produce in a fortnight ?   (2 mks)

b) A car needs 4 litres of petrol to cover 80 km. How many more
litres of petrol does the car need to cover 120 km?   (2 mks)

10

24. A village had 90,000 people, $\underline{2}$ are males and the rest are
    females. 5

    After 10 years, the national population census shows that the
    number of males increased by ½ and the number of females increased
    by $\underline{2}$ of what was there by then.
        5

    Find the total number of people in the village by now.   **(5 mks)**

25. In the figure below, **ABO** is an equilateral triangle. Use it to answer
    questions that follow.
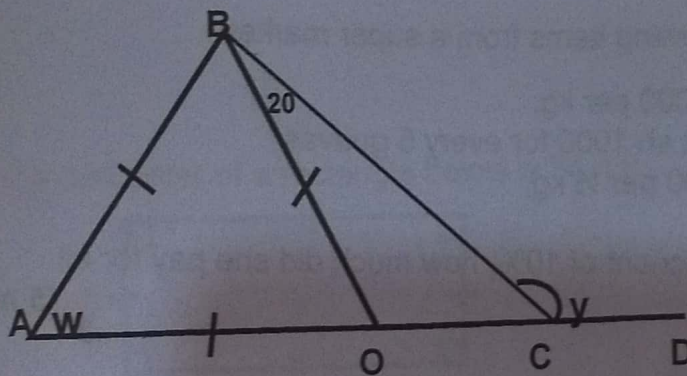
    a) Find the size of angle;   **(2 mks)**

    i) W

ii) Y

b) **2k** is a complement of 60⁰. Find the value of **k**.   *(2 mks)*

26. Judith bought the following items from a super market.

   ➤ 3kg of sugar at sh 4000 per kg.
   ➤ A score of guavas at sh 1000 for every 5 guavas
   ➤ 2kg of rice at sh 2500 per ½ kg.

   If she was given a discount of 10%, how much did she pay for all
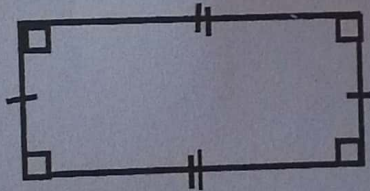   Items?   *(5 mks)*

27. a) Using a pencil, a ruler and a pair of compasses only. Construct a
   Square KLMN in a circle of radius 3cm. (4 mks)

   b) Measure LN and find the area of the square KLMN. (2 mks)
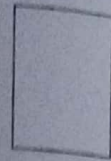
28. The perimeter of a rectangle below is 84 dm.

   a) Given that the ratio of its length to its width is 5:2. Find its actual
   length. (3 mks)

Turn over

b) Work out the area of the rectangle above.   (2 mks)

29.a) Simplify 0.37 − 0.12 + 3.5   (2 mks)

b) Work out $\dfrac{0.45 \times 0.12}{0.09 \times 1.5}$ (3 mks)

30. The table below shows marks obtained by P.6 candidates in a Mathematics test.
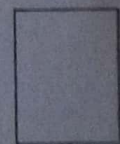
Marks	90	70	80	60
Number of pupils	3	4	1	2

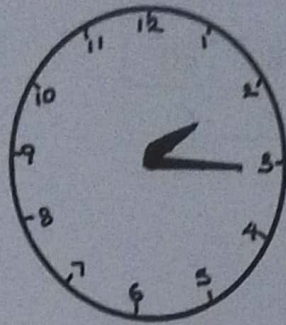a) How many pupils did the test?   (01 mk)

b) How many pupils scored above the average mark ?   (3 mks)

Turn over

15

31. A bus started travelling at 11:45 am and reached its destination in the afternoon time shown on the clock face below.

a) How long did the bus take to cover the distance ? **(3 mks)**

b) If the bus was travelling at a speed of 180km/h, find the distance covered. **(2 mks)**

32. a) The sum of length of all edges of a cube is 480cm. Find the length of each side of a cube. (2 mks)

b) In a test of 30 questions, a teacher awarded 5 marks for every correct answer and deducted 2 marks for every wrong answer. If a pupil got 80 marks, how many correct answers did the pupil get? (3 mks)

E N D