



NORTH KIGEZI DIOCESE

P.L.E MOCK 2023

MATHEMATICS

Time Allowed: 2 Hours 30 Minutes

Index No.

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Candidate's Name

Candidate's Signature

School Name

District Name

Read the following instructions carefully:

1. This paper has **two** sections: **A** and **B**.
2. All the working for both sections **A** and **B** must be shown in the spaces provided.
3. **All** working must be done using a blue or black ball-point pen. Diagrams should be drawn in pencil.
4. No calculation are allowed in the examination room.
5. Unnecessary changes of work may lead to loss of marks.
6. Any handwriting that cannot be easily read may lead to **loss of marks**.
6. Do **not** fill anything in the boxes indicated:

"For Examiners' Use Only"

and those inside the question paper.

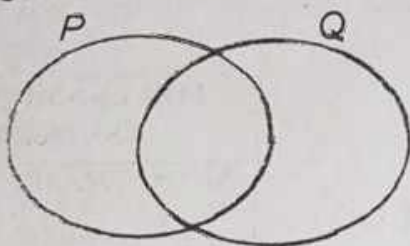
FOR EXAMINERS' USE ONLY		
Qn. No.	MARKS	EXR'S NO.
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

SECTION.A. (40 Marks)

1. Subtract; $6 - 2$

2. Find the number that was expanded to give;
 $(4 \times 1000) + (3 \times 100) + (7 \times 1)$

3. Shade $P \cup Q$ in the Venn diagram below.



4. Find the Greatest Common Factor (GCF) of 16 and 24.

7. A lesson ended at a quarter to Midday. Write this time in figures in 12 hour clock system.

8. The table below shows marks scored by pupils in a test.

Marks	70	85	68	90	80
No. of pupils	2	3	1	2	1

Find the median mark.

9. Given that $a=3$ and $b=2$. Find the value of b^a .

10. Find the place value of 3 in 234_{five}.

5. Increase 480 pupils in the ratio of 5:4.

6. Using a ruler and a protractor, draw an angle of 45°

11. At Jex Forex bureau, US\$ 1 costs Ug. Sh. 3600.

Find how much in US dollars can one get with Ug. Sh. 162,000?

12. A motorist covered 42km in $1\frac{1}{2}$ hours.
Calculate the motorist's average speed.

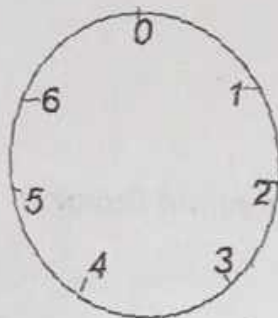
17. A tank is $\frac{3}{4}$ full of water. When 220 litres are drawn from the tank, it becomes $\frac{1}{5}$ full. Find the capacity of the tank.

13. Given that $M = \{r, k\}$. List all subsets of set M.

18. The exterior angle of a regular polygon is 36° . Find its number of sides.

14. Write 4372 in standard form.

15. Use the dial below to work out $4 + 5$
(finite 7)



19. Tom is thrice as old as Jack. The difference between their ages is 16 years. How old is Jack?

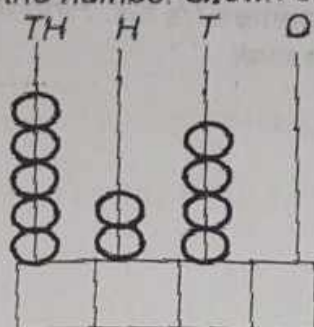
16. The total surface area of a cube is 216m^2 . Find the length of each side.

20. After selling a dress at sh. 18000, a trader made a loss of 10%. Find the cost price of the dress.



SECTION B. (60 MARKS)

21. (a) Write the number shown on the abacus below



(a) Write the number above in words.

(b) Find the product of the value of 5 and the place value of 4.

(05marks)

22. The sum of three consecutive odd numbers is 39.

(a) Find the numbers.

(b) Express the largest number as a product of its prime factors.

(04 marks)

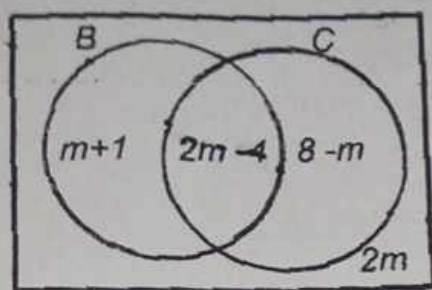
23. A businessman borrowed sh. 90,000 from a SACCO which offers an interest rate of 20% p.a.

(a) Calculate the interest the businessman paid at the end of 9 months.

(b) Find the amount paid at the end of that period.

(05 marks)

24. The Venn diagram below shows the number of farmers who grow cassava (C) and beans (B) in a village.



Given that 10 farmers grow cassava.
(a) Find the value of m .

- (a) If a farmer is selected at random to be the Chairperson, find the probability that the farmer grows beans only.

(05 marks)

25. The mean of 3, 5, 7, $x + 6$, 7 and 2 is x .
(a) Find the value of x

- (b) Find the range of the numbers.

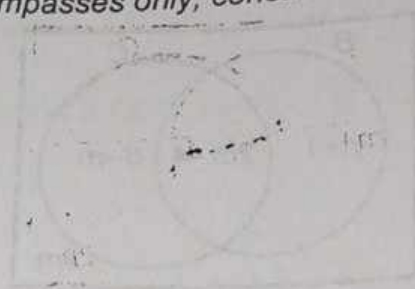
(05 marks)

26. Study the table below and complete it.

Denomination	No. of notes	Amount
One thousand shillings	5	Sh.
Five thousand shillings	Sh. 25000
Two thousand shillings	Sh.
..... thousand shillings	7	Sh. 70,000
Twenty thousand shillings	2	Sh.
Total		Sh. 160,000

(05 marks)

27. (a) Using a ruler, a pencil and a pair of compasses only, construct a square of diagonal 9cm.



(b) Measure its side.....

(05 marks)

28. (a) Simplify; $9n - 1 - 2n + 4$

(b) Solve; $\frac{2}{3}k - 4 = 8$

(05 Marks)



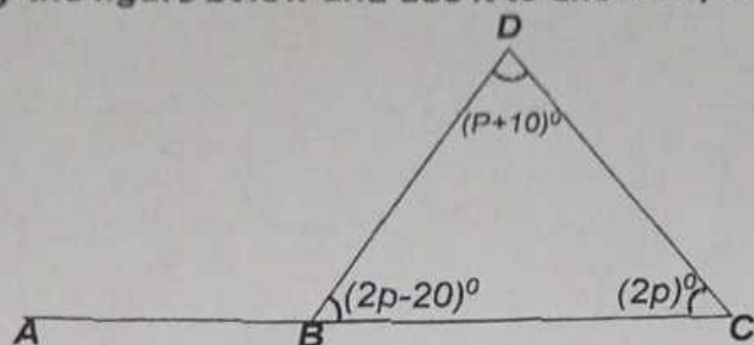
29. Kule started driving at 7:15am and reached his destination at 9:30am.

(a) Find the time taken by Kule to reach his destination.

(b) If he was driving at an average speed of 64km/hr, calculate the distance he covered.

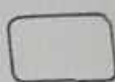
(04 marks)

30. Study the figure below and use it to answer questions that follow.

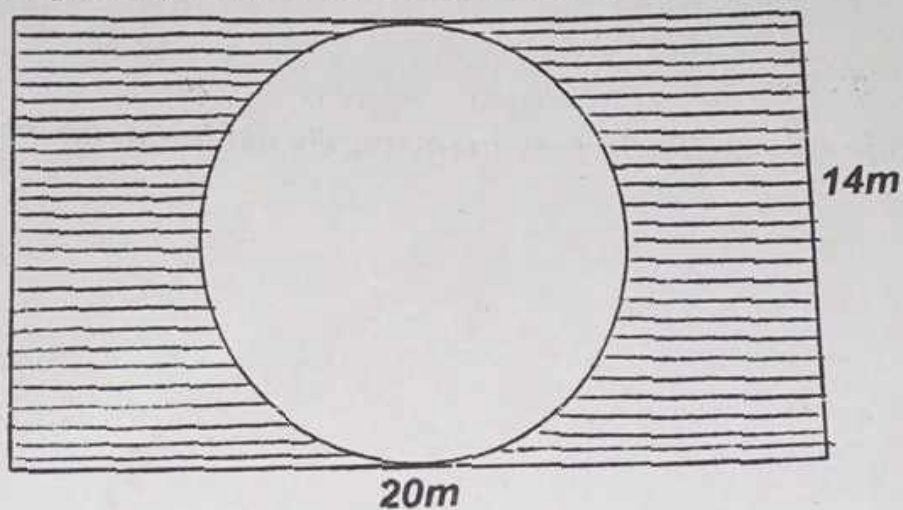


(a) Find the value of p .

(b) Find the size of angle ABD .


(05 marks)

31. The figure below shows a circle inside a rectangle.



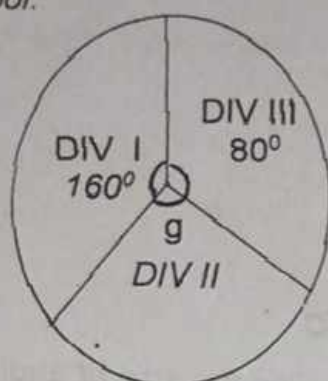
(a) Find the area of the rectangle.

(b) Find the area of the circle.

(c) Calculate the area of the shaded part.

(06 Mark)

12. The pie chart shows the grades obtained by P.7 pupils in end of term I examinations in a certain school.



(a) Find the value of g in degrees.

(b) If 60 pupils passed in grade II and DIV III, how many pupils did the examination?

(c) Express the number of DIV I candidates as a fraction in its lowest terms.

(06 marks)

END

