MBARARA MUNICIPAL SCHOOL
PRE-MOCK EXAMINATIONS SET 1 TERM II, 2024.
MATHEMATICS
TIME: 2Hours 30:Min.

Index No.

EMIS NO.					PERSONAL NO.		

Candidate's Name: --

Candidate's Signature:---

Section:-----------------------------------Stream--------------------Date----------------

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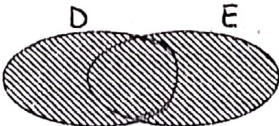**Read the following instructions carefully:**

1. The paper has two Sections: A and B.

2. Section A has 20 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 the spaces provided.

5. All answers must be written using a blue or black ball point pen or ink.

6. Diagrams should be drawn in pencil.

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

8. Any handwriting that cannot easily be read may lead to loss of marks.

9. Do not fill anything in the boxes indicated for Examiners' use only.
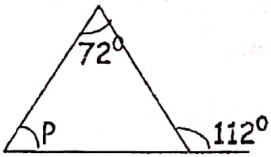
FOR EXAMINERS' USE ONLY		
	MARKS	T/L MARKS
Section A		
Section B		
Total		
Teachers' comments		

PM7/ II-TOB/KS/P6/2024

1

Answer all questions in this section (Questions 1 to 20 carry two marks each).

1. Describe the shaded region in the Venn diagram below. 	2. Work out: 10 – 2 x 3
3. Arrange the integers ⁻6, ⁺5, ⁻3, ⁺2, 0 in descending order.	4. Write 9740032 in words.
5. A Mathematics examination started at 9:45a.m and ended at 12:15p.m. How long did the examination last?	6. With the help of a ruler, a sharp pencil and a pair of compasses only, construct an angle of 120°.
7. Increase 3600 by 15%.	8. Okuku bought 6 cups at Sh.12,000. Find the number of cups Okuku would buy if he had Sh.8,000.

2

9. Find the next number in the sequence 1, 8, 27, 64, _____	10. Acram harvested 90Kg of simsim and packed it using 750g sachets for sale. Find the number of sachets Acram got.
11. Simplify: $2d - 3c - c + 3d$	12. The average mass of 6 boys is 45Kg and the average mass of 4 other boys is 40Kg. Find the average mass of all the boys.
13. Express 60 as a product of its prime factors.	14. Twelve men can take 10 days to complete a piece of work. Find the number of days they will take if the number of men is reduced by four.
15. In a triangle below, find the size of angle marked P. 72^0 P 112^0	16. Given that set Q has 31 proper subsets, find the number of elements in set Q.

3

17. Write 945 in Roman numerals.

18. Simplify: $^-6 - {}^-4$

19. In a box containing balls, 8 were painted blue, 10 were painted yellow and 6 were painted red. If a ball was to be picked at random, what is the chance of picking a yellow ball?

20. Find the least number of pens when divided among 12 girls or 18 girls equally leaves 5 pens as a remainder.
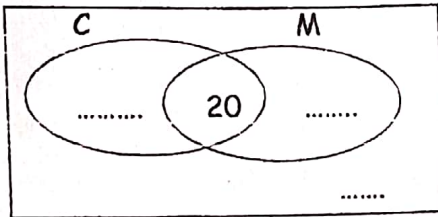
Section B: (60 Marks)

21. a) Change 103_{five} to base three. (3mks)

b) Given that $23_t = 101_{four}$, find the value of t. (3mks)

22. The exchange rate of United States dollar (USD($)) to Uganda s (Ush) and Kenya shillings (Ksh) to Uganda shillings are shown below.

(US$ 1=Ush.3800

Ksh 1 =Ush.32

a) How many United States dollars will Stephen get from Ush.1710,000? (2mks)

22.b) If the cost of a phone is US$ 480, how much would this be in Kenya Shillings? (3mks)

23. At a party attended by 80 guests, 60 guests ate chicken (C), 10 guests ate meat (M) but not chicken, 20 guests ate both chicken and meat while 5d did not eat any of the two types of sauce.

a) Complete the Venn diagram below. (3mks)

$(\Sigma) = 80$

b) Find the number of guests who did not eat either chicken or meat. (2mks)

24. A bus travelling at a steady speed of 74Km/h left town P at 10:50a.m and reached town Q at 2:20p.m. Calculate the distance between town P and town Q. (4mks)

5

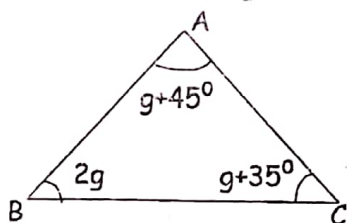**25.a)** Solve the equation; $2(y+3) + 4(2+y) = 44$. (3mks)

b) Solve the inequality; $3k - 1 > 11$. (2mks)

26. Study the triangle below and answer the questions that follow.

a) Find the value of g. (3mks)

b) Find the size of angle BAC in the triangle above. (2mks)

27. P.7 pupils obtained the following marks in the End of term one exams.

Marks	90	50	60	80	40
Tallies	//	////	//	///	////

a) Find the mean mark. (3mks)

6

27.b) How many pupils did the examination? (1mk)

28. Ogutu deposited Sh.600,000 in a bank that offers a simple interest rate of $12\frac{1}{3}$ %p.a. Calculate the amount of money he earned from the bank after 4 years. (5mks)

29. Using a ruler and a pair of compasses only and a sharp pencil, construct a rectangle ABCD where $\overline{AB}$ = 8cm and $\overline{BC}$ = 4.5cm. (5mks)

(ii) Measure the length of diagonal AC. (1mk)

1

30. The total mass of tins of honey in a box is 6.25Kg. The mass of each tin is 250g.

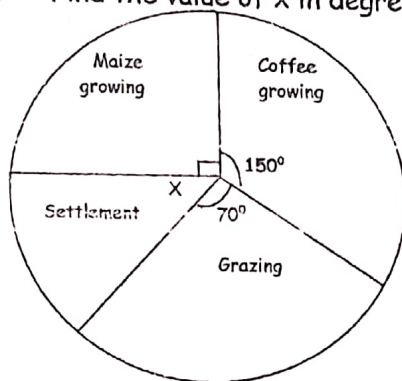a) Find the number of tins in the box.
(3mks)

b) Change $3\frac{1}{2}$ litres to milimelitres.
(2mks)

31. Four boys Alex, Tom, Abdul and Musa shared Sh.120,000 among themselves in the ratio of 2:3:1:4 respectively. Find how much each boy got. (5mks)

32. The Pie chart below shows how a farmer divided his land.

(a)   Find the value of x in degrees.
(2mks)

b) If 14 acres are used for grazing, find the size of the land the farmer owns.
(3mks)