BUGANDA EXAMINATIONS COUNCIL (BECO)
PRIMARY SEVEN MOCK EXAMINATIONS - 2025
MATHEMATICS
Time Allowed: 2 hours 30 minutes.

Index No.

Candidate's Name:...

Candidate's Signature...

School Name..

District ....

READ THE FOLLOWING INSTRUCTIONS:-

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. Attempt **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. Diagrams should be drawn in pencil.
6. Unnecessary changes of work may lead to loss of marks.
7. Any handwriting that cannot be easily read may lead to loss of marks
8. Do not fill anything in the boxes indicated for examiner's use only.

FOR EXAMINERS' USE ONLY		
Number	**Marks**	**Sign**
1-10		
11-20		
21-30		
31-32		
TOTAL		

SECTION A (40 MARKS)

1. Work out $81 \div 3$

2. Write twenty thousand two hundred two in figures

3. Given that R = 2, 3, 5, 7 and K $\cap$ R (2, 3). Find $\cap$ (K) if K only = $\{0\}$

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

5. Simplify $2 - (r - 2)$

6. A debate lasted for $1\frac{1}{4}$ hours and ended at 2.10p.m. At what time did the debate start?

7. In the space below draw an angle of 110° using a protractor, a pencil and a ruler.

8. A piece of cloth measures 2.75 metres. How many pieces of cloth of length 0.5 centimeters can be cut from the cloth?
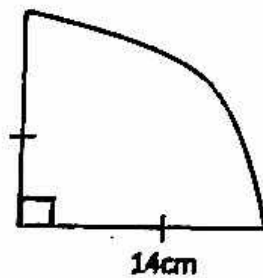
9. Solve: $y + 2 = 1$ (finite 7)

10. The mean age of 7 pupils 13 years. Find the total age of the pupils

11. The prime factors of $72 = \left\{ 2_1, 2_2, 2_3, 3_1, X \right\}$. Find the value of X

3

12. Round off 1.799 to one place of decimal

13. Given that $k = \frac{1}{4}$ and $a = \frac{1}{2}$, find the value of $q \div k$

14. Work out the perimeter of the figure below:- $\left(\pi = \frac{22}{7}\right)$

14cm

15. Given that the exchange note is 1Ksh. = Ugshs.35, find the cost of a radio which in Kenya shillings which costs 827950 Uganda shillings.

16. ....Find the complement of 29°.

4

17. Express $10\frac{1}{2}$ litres as cubic centimeters.

18. Work out $1000_{two} - 11_{two}$

19. Solve $t - 3 \geq -2$

20. Decrease 40 eggs by 40%

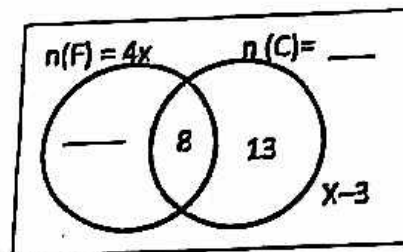21(a) Find the number whose scientific notation is 1.75×10^2. (02marks)

(b) Solve $2^{2p} \times 2^p = 64$. (02marks)

22. In a family, 4x members eat fish (F), 8 members eat both Chicken (C) and Fish, 13 members eat chicken only while x − 3 do not eat any of the two.

(a) Use the above information to complete the Venn diagram below. (02marks)

(b) Given that 14 members do not eat chicken, find the total number of members in the home. (03marks)

6

23(a) Change 17_{ten} to the binary system. (02marks)

(b) Find the value of m : $m + 11_{two} = 101_{two}$. (02marks)

24. The interior angle of a regular polygon is five times its exterior angle.

(a) Calculate the number of sides of the polygon. (03marks)

(b) Work out the interior angle sum of the polygon. (02marks)

25. Mwanje rides 2.97km from his home to school. The wheel of the bicycle has a diameter of 63cm, how many revolutions does the wheel make to cover the distance? (05marks)

$$\left(use \; \pi \; as \; \frac{22}{7}\right)$$

26. A girl went to shop items as shown in the table. (04marks)

(a) Complete the table below.

ITEM	QUANTITY	UNIT PRICE	AMOUNT
Meat	2½kg	Shs. per kg.	Shs. 37,500
Rice		Shs. 4,000	Shs. 8,000
Cooking oil	3.5 litres	Shs. 7,000	Shs. 7,500
Soap	1½ bars	Shs.	Shs.7500
Total expenditure			

(b) If she remained with shs. 10,000, how much money did she have at the beginning?

(01mark)

27. On a farm of animals, 10% are goats, 25% are cattle, 18% are sheep and the rest are rabbits. If there 141 rabbits on the farm, how many more cattle than goats are there on the farm? (05marks)

28(a) Using a pair of compasses, a pencil and a ruler, construct a triangle FEL where EF = 6.5cm, angle EFL = 45° and angle LEF = 60°. (05marks)
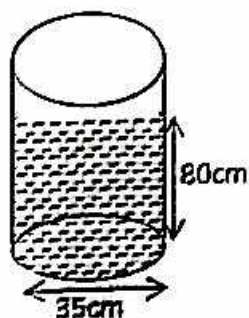
(b) Drop a perpendicular from L to meet EF at Q. (01mark)

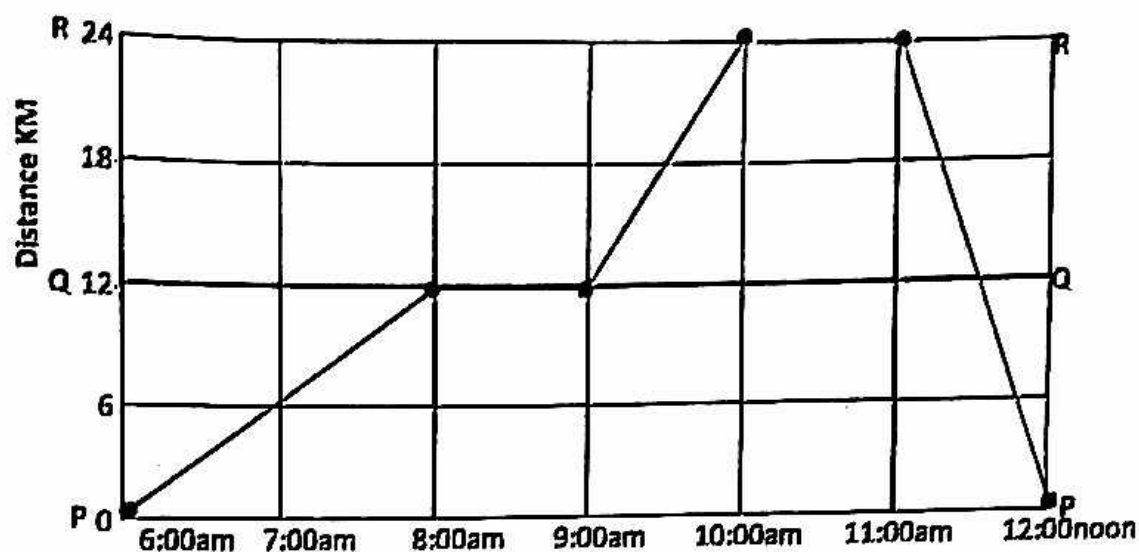29. The table below shows the arrival and departure time for a taxi from Kampala to Jinja

Town	Arrival time	Departure
Kampala		8.15 a.m
Banda	8.30 a.m	8.45 a.m
Mukono	9:15 a.m	10:05a.m
Lugazi	10:40 a.m	10: 05 a.m
Jinja	11:30 a.m	

(a) At what time in the 24 hour clock, does the taxi leave Mukono?   (01 mark)

(b) If the distance between Kampala and Jinja is 78km, find the taxi's average speed from Kampala and Jinja.   (03marks)

30. The tank below is $\frac{2}{5}$ full of water. How many litres does it contain when it is half way full. $\left(\pi = \frac{22}{7}\right)$.   (05marks)

80cm

35cm

10

31. The travel graph below shows a cyclist's journey from town P through town Q to town R.

(a)　　How far is Q from R?　　　　　　　　　　　　　　　　(02marks)

(b)　Calculate the average speed of the cyclist for the whole journey.　　　(03marks)

(c)　　At what time did the cyclist rest for the first time?　　　　　(01mark)

11　11

32(a)   Solve the inequality $x - 5 \leq -2$

(b)   Solve the equation; $\frac{1}{2}P + 3 = P - 1$ (03marks)

END

12

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