UNEB BLUE PRINT 2024
RE-MODERATED SET SIX
Mathematics

Time allowed: 2 hours 30 minutes

Random Number						*Personal No.*		

Candidate's Name: ……...

Candidate's Signature: ……

District ID No.

READ THE FOLLOWING INSTRUCTIONS CAREFULLY:

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

2. Answer **all** questions. 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** ballpoint pen or ink. Any work done in pencil other thangraphs and diagrams will **not** be marked.

4. **No calculators** are allowed in the examination room.

5. Unnecessary **changes** in your work and handwriting that cannot be easily read may lead to **loss of marks.**

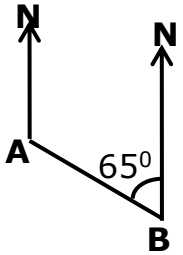
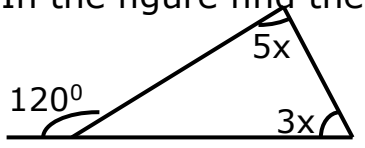
6. Do not fill anything in the table indicated **"For Examiners' use only"** and the boxes inside the question paper.

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		

Turn Over

SECTION A

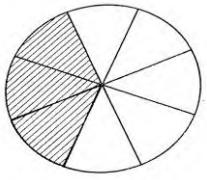
1.	Multiply: 0.4 x 0.2.	2.	Subtract (2x −4) from (5x −4)
3.	Find the value of the exterior angle of a regular hexagon.	4.	Two numbers, 27 and 36 have a Lowest Common Multiple(LCM) of 108. Find their GCF.
5.	The average weight of 5 boys is 48kg. When a sixth boy joins them average weight becomes 45kg. What is the weight of the sixth boy?	6.	The Perimeter of an equilateral triangle is 36cm. If one side is (x+8) cm, find the value of x.
7.	Using a ruler, a sharp pencil and a pair of compasses only, construct an angle of 75^0 in the space below.	8.	During a debate, each side gave 20 views. If the secretary was awarding 3 points for every defended view and deducting a point for every opposed view. How many views did the proposers defend if their final score was 72 points?

9.	Change 13_{four} to binary base.	10.	Solve: $3y = 5$ (finite 7)
11.	The sum of four consecutive counting numbers is 46. What is of the first number?	12.	Water in a 20 litre jerycan leaks at a rate of half a litre every 40 minutes. How much water will be left in the jerycan after 4 hours?
13.	How much simple interest on Sh.240,000 at a rate of four and a half percent per month would Sam pay to a Micro finance bank after 3 months?	14.	In a school, the fraction of the boys is a fifth more than that of girls. The school has 280 girls. Calculate the total number of pupils in the school
15.	How many tins of 500grams would one get from a 4 kilogram tin of KIMBO?	16.	The average weight of four boys is 56kg, when two teachers join them, their average weight becomes 52kg. Find the weight of the two teachers.
17.	In the figure below, find the bearing of town B from town A. 	18.	In the figure find the value of x. 

19.	A man's stride is 30cm. How many strides does he have to make to cover a distance of 150 metres?	20.	Find the smallest number that can be divided by 8 or 12 and leaves 5 as the remainder.

SECTION B

21. **The shaded part in the figure below represents the number of boys in a school.** If the If there are 490 girls in the school,



(a) How many pupils are in the school? (03 Marks)

(b) How many more girls than boys are in the school? (02 Marks)

22. **In a class party, two types of drinks were served, soda (S) and mineral water (M). 30 pupils took soda and t pupils took both soda and mineral water, 6 pupils took neither of the drinks while 17 pupils took only mineral water. The number of pupils who took soda only was twice that of those who took both soda and mineral water.**

a) Draw a Venn diagram in the space below and represent the above information. 2 marks

b) Find the number of pupils who took both drinks. (02 marks)

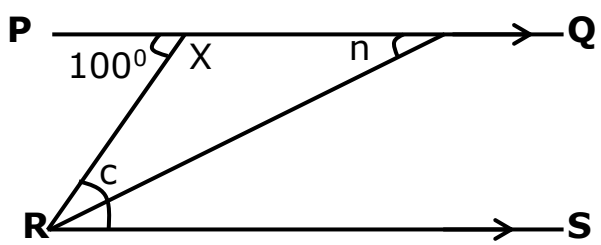
c) Calculate the total number of pupils in the class. (02 marks)

23. **In Atiri Primary School there are three bells, one is rung after 30 minutes for Nursery, the next after 40 minutes for Lower primary and 60 minutes for Upper primary.**

a) If all lessons begin at 7:30am. After how long will all the bells ring at the same time? 3 marks

b) How many lessons will each class have had by the time all the bells ring together? 2 marks

24. **In the figure below $\overline{PQ}$ is parallel to $\overline{RS}$. Study it carefully and answer the questions that follow.**



Find the size of the angles marked x, c and n.

i) X (1 mark)

ii) C (2marks)

iii) n (2marks)

25. **While testing for COVID 19 cases in Uganda on 18th November, 2020, the ratio of negative to positive cases was 3:25 respectively. 40% of the positive cases were from Elegu town while a fifth of the negative cases were from Luweero. If 60 of the remaining negative cases were from Kampala,**

How many positive and negative cases each were tested in Uganda that day? (3 marks)

(b) Find the number of positive cases registered in Elegu town that day (02 Marks)

26. Samson had 4y pancakes which was twice as much as Asumputa's. Gloria had four pancakes more than Samson while Maria had half as many pancakes as Gloria. If the four shared 54 pancakes, How many pancakes did each get?
(05 Marks)

27. a) Peter packs milk in packets of 750ml each and then delivers 285 litres to the nearby dairy for sale. How many packets of milk does Peter deliver to the dairy?
(02 marks)

b) If Peter rides on a motorcycle while taking the milk to dairy travelling at a speed of 27km/hr for two hours, at what speed must he ride to come back to cover the same distance in 1½ hours? (03 marks)

28. **John and his young daughter travelled from Kampala to Nairobi by bus. John paid K.shs 1,500 and the daughter paid K.shs 750. 1 Kenya shillings (K.shs = 24 Uganda shillings)**

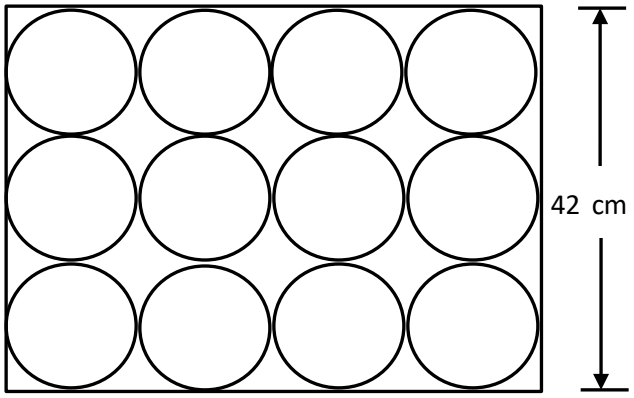
a) Workout the bus fare in Uganda shillings which each of them paid.
(03 Marks)

b) If John had Ugsh.100,000 at the beginning of the journey, what was his balance in Kenya shillings after paying bus fare for himself and the daughter?
(02 Marks)

29. (a) Add: 3 + 4 = ……. (mod 9) (01 mark)

(b) Kirabo sat guests in groups of nines but seven got no seats she tried seating them in groups of eights but four didn't get seats and she finally sat them in groups of threes and one visitor got no seat. How many guests attended the party? (03 marks)

30. Lukwago cut out circular cards from a rectangular manilla paper whose width is 42cm as shown in the diagram below. Study the diagram and answer the questions that follow.



(a) Find the length of the manilla paper. (02 marks)

(b) Calculate the area of the pieces of the manilla paper that remained. (03 marks)

31. Aaron deposited some money in the bank which offers a simple interest rate of 12% per annum for 15 months. If he received an interest of sh.45,000.

(a) What amount of money did he deposit in the bank? (03 Marks)

(b) Calculate the amount of money he received at the end of 15 months. (02 Marks)

32. **A presidential motorcade going for elections drove from State House (ST) for 65km on a bearing 0450 to the Electoral Commission (EC) building from where it turned South East to the Polling Station (PS) for 70km.**

(a) Using a scale of 1cm to represent 10km, show the three places on an accurate diagram. (03 Marks)

(b) Find the shortest distance between the polling station and the State House in Km. (02 Marks)

GOOD LUCK