

BEPSA MOCK EXAMINATIONS

PRIMARY SEVEN , 2023

MATHEMATICS PAPER

Time allowed: 2 HOURS: 30 MINUTES

EMIS			PERSONAL No.					
INDEX NO.								

NAME:

CANDIDATE'S SIGNATURE:

SCHOOL:

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. Diagrams should be drawn in pencil.
6. Unnecessary crossing 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 EXAMINER'S USE ONLY		
Qn. No	MARK	SIGN
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 25		
26 - 30		
31		
32		
TOTAL		

Turn over

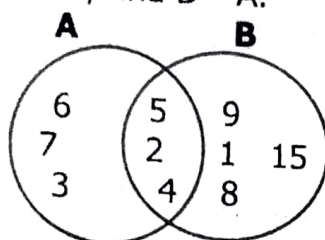
SECTION A: 40 MARKS

Questions **1** to **20** carry **2 marks** each

1. Add: $563 + 84$

2. Write in figures: "Ninety thousand eight hundred forty three" goats.

3. Use the venn diagram below to, find $B - A$.



4. Increase Sh **18,000** by $33\frac{1}{3}\%$

5. Find the next number in the sequence.
5, 6, 9, 15, 25, 40, ____.

6. Simplify: $5m + 2m - 3m$

7. Using a pair of compasses, a pencil and a ruler only, draw a line segment **NM = 6cm** and divide it into four equal parts.


8. What number has been expanded to give; $70,000 + 900 + 3$?

9. Change $5m^2$ to cm^2

10. The interior angle sum of a regular Polygon is **1080°** . Name the polygon.

11. Write **3.582** in scientific notation. 12. A cheetah ran **144km** in **2** hours, Express its speed in metres per minute.

13. Workout $(63 \div 2) + (37 \div 2)$ using distributive property.

14. Given that  represents 132 apples how many apples are represented by the shaded region.



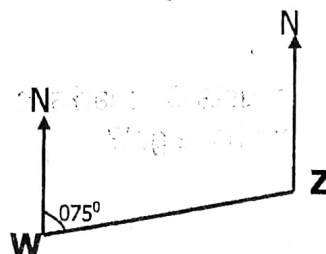
15. Convert 17_{ten} to binary base. 16. A business man borrowed **Sh.240,000** from a money lender that charges interest rate of 15% per annum for 2 years and 6 months. What interest did he pay back?

17. What is -5 plus -3 equal to?

18. Which angle is $\frac{1}{4}$ of its supplement?

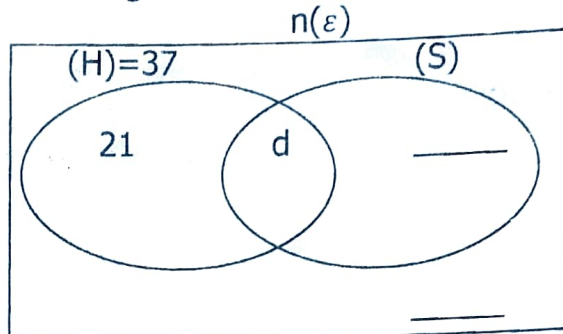
19. Solve: $5+5=k \pmod{7}$

20. Find the bearing of **W** from **Z**.



SECTION B: (60 MARKS)

21. During kids athletics held at Bukonda Primary school play ground, all kids participated in cross country (c), **37** kids participated in cross country and high jump (H) **2d** participated in only sprints (s) and cross country. 5 kids participated in only cross country, **21** in only high jump and cross country while d kids participated in all the three events.
- (a). Complete the Venn diagram correctly (2 marks)



- (b). How many kids participated in only two events. (3 marks)

22. (a). Simplify: $2\frac{2}{5} \div 2\frac{1}{2} \times 3\frac{1}{3}$. (2mrks)
(b). Workout: $\frac{2.7 + 4.8}{0.5 \times 0.06}$ (3 marks)

23. A teacher awards **7** marks for every correct answer and deducts **3** marks for every wrong answer.

(a). If a pupil gets **7** correct answers in an examination of **15** questions, how many marks does the pupil get? (2 marks)

(b). Denis gets **60** marks in a test of **20** questions. How many wrong answers will he have got? (3 marks)

24. The pie chart below shows how a farmer uses his land for cultivation. Use it to answer question that follow.



- (a). Find the value of **Z** in degrees. (2 marks)
- (b). If the farmer uses **315** hectares of land for growing maize, how many hectares of land does the farmer use? (2 marks)
- (c). Express the sector for cassava as a percentage. (1 mark)

25. (a) Solve for h : $5(h - 3) - 4(2 - h) = 4$. (3 marks)
- (b). Write the solution set for $-3m < 12$ if m is a negative integer. (2 marks)

26. Mr Andrew went shopping with two twenty thousand shilling notes and bought the following items.
 3 kg of salt at Sh 2000 per kg
 $2\frac{1}{2}$ kg of sugar each at Sh 5,000
 500 ml of cooking oil at Sh 8,000 a litre
 2 tins of cow boy at Sh 10,000
- (a). How much does his expenditure amount to? (4 marks)
- (b). Find Andrew's balance (2 marks)

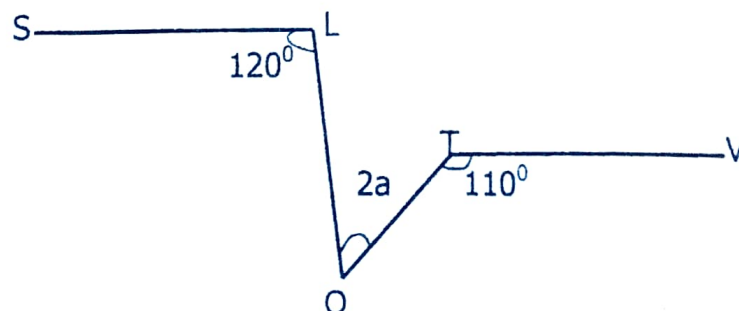
27. Primary seven pupils did a mathematics test and scored marks as shown in the table

Marks	40	35	y	90
Number Of Pupils	3	4	2	1

- (a). How many pupils did the test? (2 marks)
- (b). Find the value of **y** if the mean mark was **48** marks. (2marks)

- (c). What was the range of the scores above 40 marks? (1mrk)

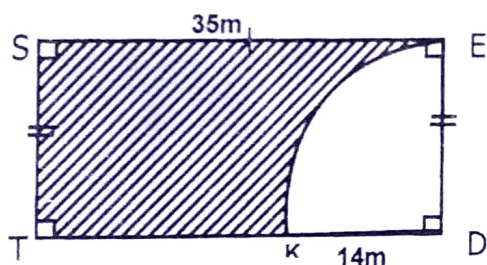
3. Use the figure below to find the size of angle TOL. (4 marks)



29. The ratio of sick children to men to women in a hospital is **5: 2: 3** respectively.
- (a). if there are **120** sick women, how many children are sick? (2mrks)
- (b). How many adults are sick? (2mrks)

- (c). The cost of **7** exercise books is **Sh. 21,000**. Calculate the cost of a dozen of books (2 marks)

30. Study the figure below and use it to answer the questions that follow.
Line **KD = DE = ST** and **SE = TD**



- (a). Find length of arc KE (Take $\pi = \frac{22}{7}$) (2 marks)
- b). Workout the area of the shaded part. (3 marks)

31. A taxi driver started a journey at **11:50 am** from Kagadi travelling at **60km/hr** for **40 minutes**, he then took a rest of **20 minutes** at Kibaale town council. He continued further to Kakumiro Town council a distance of **34km** driving at a speed of **72km/hr**.
- (a). At what time did the taxi driver reach Kibaale Town council? (b). Work out the taxi driver's average speed over the whole journey. (2 marks)

32. a). Using a pair of compasses, a pencil and a ruler only. Construct a quadrilateral **ABCD** such that **AB = BC = 4.5cm** and angle **ABC = 135°**. (4 marks)

(b) Measure diagonal **AC**.

(1 mark)

**END
GOOD LUCK!**