SIR APOLLO KAGGWA SCHOOLS SINCE 1996
PLE PREP TEST IV TERM 2 2023
PRIMARY SEVEN
MATHEMATICS

Time allowed: **2 hours   30 minutes**

Candidate's Name: _____

Candidate's Signature: _____

District Name: _____

School Name: _____

Read the following instructions carefully:

1. The paper has **two** sections: A and B

2. Section **A** has 20 short 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 alteration of work may lead to loss of marks.

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

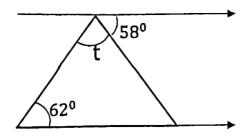8. Do **not** fill anything in the boxes indicated for Examiner's use only.

Numbers 1 to 20 carry 2 marks each

1. Work out: **9.6 – 7.1**

2. Solve for m in the equation $2m = 8$

3. Write **'one hundred eight'** in figures.

4. Show the operation **-3 + 3** on the number line below.

5. Given that **Set R = {1, 2, 3, 4}** and **S = {4, 5, 6, 7}**.
   Find **n(R∪S)**

6. Express **5100** in standard form.

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7. Find the size of angle marked **t** in the diagram below

8. Kironde travelled for $4\frac{1}{6}$**hours**. Convert this time to minutes.

9. Express **13**ten to binary base.

10. Ali tossed a dice once. Find the probability that a factor of 6 showed up.
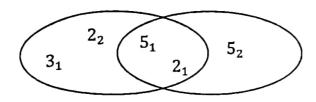
11. Work out: $\frac{5}{8} + \frac{5}{6}$

12. Musa bought 50 US dollars (USD) at Uganda Shillings (UGX) 192,500. Find the amount of USD Musa would buy if he had UGX 770,000.

13. Write the number which has been expanded to give;
$$(2 \times 10^3) + (2 \times 10^1) + (3 \times 10^0)$$

14. The average age of Ddumba's three children is 11 years. The average age of two of the children is 10 years. Find the age of the 3rd child.
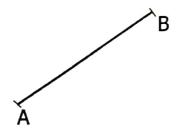
15. Find the two numbers that have been prime factorized on the Venn diagram below.

16. A Mathematical set costs five times as much as a rubber. Sula bought a Mathematical set and two rubbers and paid **Sh.6,300**. Find the cost of a rubber.

17. Nakirya took 26 days weeding her millet garden. She completed weeding it on Tuesday. What day of the week did she start weeding the garden?

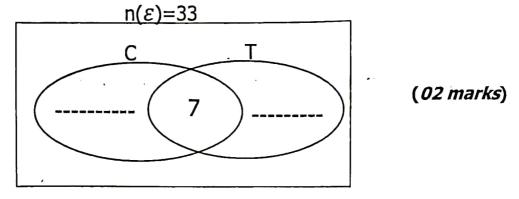18. Using a ruler, sharp pencil and a pair of compasses only, bisect line **AB** below

B

A

19. Express **0.15 kg** as grammes.

20. The time is **18 55 hours.** What time is it on a 12-hour clock system?

Marks for each number are indicated in the brackets

21. A class has **33** pupils. **19** play tennis **(T)**, **7** play both tennis and chess **(C)** and p play chess only.

(a) Complete the Venn diagram below

$$n(\varepsilon)=33$$

(02 marks)

(b) Find the value of p (02 marks)

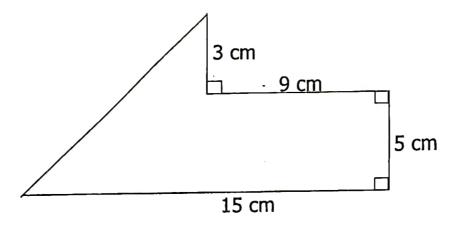(c) Find the total number of pupils who play only one of the mentioned games.

(01 mark)

6

22. (a) With the help of a ruler, sharp pencil and a pair of compasses only, construct a triangle **BCG** where <**BCG** = 60^0, $\overline{BC}$ = **8 cm** and $\overline{GB}$ = **7.5 cm**.

(*04 marks*)

(b) Measure: < CGB = _____

(*01 mark*)

23. Obbo got a loan of Sh. 200,000 from a micro finance bank. He paid back a sum of Sh. 220,000 after the loan period.

(a) Calculate the interest Obbo paid.

(*02 marks*)

(b) If the loan period was 6 months, find the interest rate per year.

(*03 marks*)

24. Study the diagram below and use it to answer questions (a) and (b) that follow.

(a) Find the area of the figure

(*03 marks*)

(b) Calculate the distance round the figure

(*02 marks*)

25. Duku drove at 96 km/h for 2 hours and 30 minutes. Calculate how long the return journey took him at a steady speed of 80 km/h.

(*04 marks*)

8

26. (a) Solve for **y**: $5 - 2(y - 8) = 13$

(03 marks)

b) Solve the inequality below.

$5 - 2x \geq {}^-7$

(02 marks)

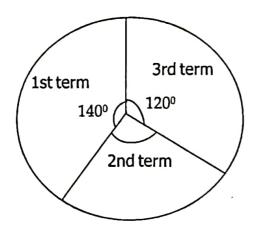27. (a) Work out: $\dfrac{18 \times 0.45}{2.7}$

(03 marks)

(b) Work out: $3\frac{1}{2} - 1\frac{1}{4} \times 2\frac{2}{3}$

(03 marks)

9

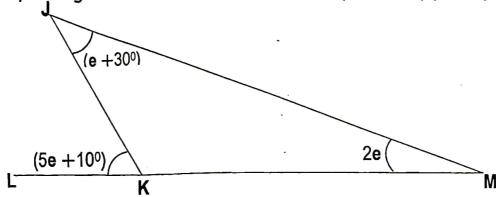28. The pie chart below shows Naiga's last year's expenditure of Sh.1,800,000 on her son's school requirements.

Calculate the amount of money Naiga spent on the requirements per term.

(04 marks)

29. A tin of length 25 cm, width 16 cm and height 50 cm is full of milk.
The milk is sold using a cylindrical cup of radius 5 cm and height 7 cm.
How many **litres** of milk will remain in the tin after selling 20 full cups?
(Use π as $\frac{22}{7}$)
(05Marks)

30. Study the figure below and use it to answer questions (a) and (b) that follow

(a) Find the value of **e**

(03marks)

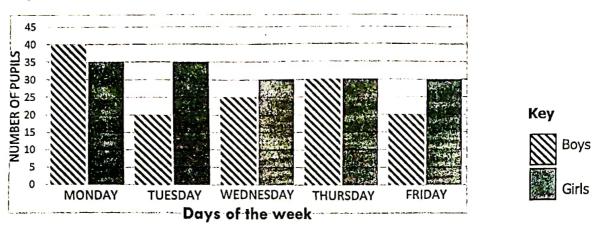(b) Work out the size of angle **JKL**

(02 marks)

31. Naddunga bought a sack of **100 kg** òf groundnuts at **Sh. 7,500 per kg**. She then packed the groundnuts into **2 kg packets**. She sold all the packets and made a profit of **Sh.250,000**.
At what price did she sell each **2 kg** packet?

(05 marks)

11

32. **The bar graph below shows the number of girls and boys present each day of the week in a class. The class has 40 boys and 35 girls. Study the graph and use it to answer the questions that follow.**

(a) On which day were all the 75 pupils present?

(*01 mark*)

(b) On which two days was the attendance of boys the same? · · ·

(*01 mark*)

(c) Calculate the average number of girls present in the week.

(*02 marks*)

(d) What percentage of the class was present on Thursday?

(*02 marks*)

THE END

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