## SECTION A: (40 MARKS)

Answer all questions in this section.
Questions $\mathbf{1}$ to $\mathbf{2 0}$ carry two marks each.

1. Work out: 32- 55
2. Express "Nine hundred thousand eight" in figures
3. What is 39 in Roman numerals?
4. What is the value of 3 in 87.643 ?
5. Simplify: -8-7
6. Express $2^{\frac{1}{2}} \mathrm{~kg}$ to grammes.
7. Without dividing, show that 258 is divisible by 3 .
8. In the Venn diagram below, describe the un shaded part.

9. $\bigoplus$ If represents 16 balls, draw a pictogram showing 64 balls.
10. Given that set $\mathrm{K}=\{$ all square numbers less than 10$\}$. Find $\mathrm{n}(\mathrm{K})$
11. Change $123_{\text {five }}$ to binary base.
12. If one Planet is equivalent to Ug.sh.650, 000.How much in Uganda currency can Mr. Kayole get if he has seven planet?
13. With the help of a ruler and a pair of compasses and a pencil only construct an angle of $45^{\circ}$ in the space provided below.
14. Solve for $\mathrm{y}: 4 \mathrm{y}=6-\mathrm{y}$
15. The LCM of two numbers is 72 and their GCF is 6 , find the first number if the second number is 24 .
16. How many triangles can you see in the diagram below?

17. Calculate the value of k in degrees in the diagram below Cone
18. Draw the Venn diagram to show that all Hens (H) are Birds (B) in the space provided below
19. Express 0.36 in a fraction in its lowest terms.
20. Expand 4826 using the powers of ten

# SECTION B: (60 MARKS) <br> Answer all questions in this section. <br> Marks for each question are indicated in the brackets. 

21. 

a) Work out: $\frac{0.34 \times 0.48}{0.6 \times 0.4}$
(3marks)
b) . Simplify: $\frac{2}{3}-\frac{1}{4}+\frac{3}{5}$
22. In a class of 100 pupils, 50 pupils like G.nuts (G), 60 pupils like Fish (F), $\boldsymbol{y}$ pupils like both while 5 pupils like neither of the two.
a) Complete the Venn diagram below.

$$
n(\varepsilon)=
$$


b). How many pupils like only one type of sauce?
23.The sum of three consecutive even numbers is 98 . Find the numbers if the first number is k .
(05marks)
24. Juma wrote three- digit numbers using the digits: 1,3 and 6
a) Write down all the possible 3- digit numbers Kato wrote. (3marks)
b) Find the sum of smallest and biggest three digit number Kato can form using the above digits
(2 marks)
25. Two bells are rung at intervals of 30 minutes and 40 minutes for the lower and upper primary respectively.
(a) After how many minutes will the two bells ring together? (3marks)
(b) If they last rung together at 10:00 a.m., at what time will they ring together again? (2marks)
26. Study the number line and use it to answer the questions that follow.

(a) Identify the integers represented by: (1mark@)
(i) $\mathrm{a}:=$
(ii) $\mathrm{b}=\ldots \ldots \ldots$
(iii) $\mathrm{C}=\ldots \ldots \ldots$
b) Write the Mathematical sentence shown on the above number line (2marks)
28. Wandera went shopping and bought the following items.

- 2 Kg of sugar at $\mathrm{Sh} .4,500$ each kg .
- 3 Kg of beef at sh.8,000 per Kg
- 4 loaves of bread at Sh. 5000 each.
a) Find his total expenditure. (4marks)
b) If he went with Sh.40, 000, calculate her change. (2marks)

29. In a Primary Six class of 1200 pupils, there are $20 \%$ more boys than girls .
a)Find the percentage of girls
( 2 marks)
b)How many boys are in the class
(2marks)
30. The magic table below has an equal sum vertically, horizontally and diagonally, study it carefully and answer the following questions

| 8 | a | 4 |
| :---: | :---: | :---: |
| 1 | 5 | b |
| C | 7 | 2 |

a) Find the value of $a, b$, and $c$ in the above table. (6marks)
31. a) A mathematics lesson started at 8:10 a.m. and ended at 9:40 a.m. How long was the lesson? (2marks)
b) A car covered a distance of 90 km in 3 hours. Calculate the speed at which the car was travelling (2marks)
32. The table below shows the number of goals scored by different houses during the inter- class competitions.

| House | Kabalega | Mburo | Kidepo | Rwenzori |
| :--- | :--- | :--- | :--- | :--- |
| Number of goals | 12 | 6 | 10 | 8 |

Represent the above information on a pie-chart of radius 4.5 cm (5Marks)

