THE REAL PRIVATE TEACHERS' VOICE EXAMINATIONS BOARD

NEXT TO PRIMARY LEAVING EXAMINATIONS – 2022

THE VERIFIED UNEB BLUE PRINT ITEM (EIGHT)

MATHEMATICS

Time allowed: 2 Hours 30 Minutes

BASED ON THE PRIMARY SCHOOL ABRIDGED CURRICULUM FOR UGANDA

Index no:

Random No	Personal No

Candidate's name: ……

Candidate's signature: ……

School: ……

District: ……

Read the following instructions carefully

1. This paper is made up of 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 in both sections **A** and **B.**
5. All answers **MUST** be written in the space provided In blue or black ball point pens or ink. All diagrams Should be in pencil.
6. Unnecessary crossing of answers will lead to loss of Marks.
7. Poor hand writing which cannot be easily read, May lead to loss of marks.

FOR EXAMINERS' USE ONLY		
Qn.No	**MARKS**	**SIGN**
1–10		
11–20		
21–22		
23–24		
25–26		
27–28		
29 – 30		
31 - 32		
TOTAL		

SECTION A (40 MARKS)

1. Workout **321** x **3**

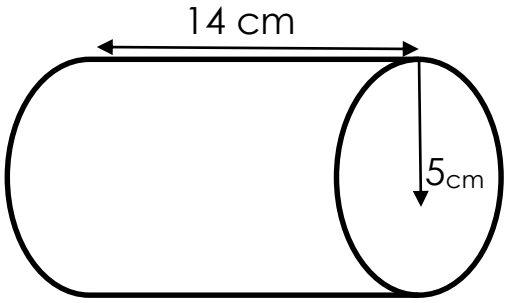
2. Simplify $^{-}$**3 - $^{-}$9**

3. Write **546** in Roman numerals.

4. Find the sum of the next two numbers in the sequence.
   1, **2**, **4**, **7**, **11**, _____, _____

5. Solve: **2**a – **6** = **10**

6. Calculate the volume of the cylinder below. (Use $\pi = {}^{22}/_{7}$)



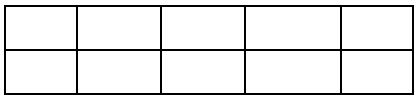
7. Given that: **P**U**Q** = {1, 2, 3, 4, 5, 6, 7, 8} **P**n**Q** = {1, 4, 7}. And **P'** = {5, 6, 8}, list the elements of set **P.**

8. Write the number whose standard form is **7.43** x $\mathbf{10^2}$

9. Change $\mathbf{1011}_{two}$ to decimal base

10. Write **9600** in standard form.

11. Shade **50%** of the figure below.



12. A mathematics exam ended at $\mathbf{11:00}_{am}$ and lasted for **2**hrs and $\mathbf{30}_{min}$**.** At what time did the exam start?

13. A crate of soda has **24** bottles. How many crates will be got from **504** bottles?

14. If today is **Friday**, what day of the week will it be after **50**days?

15. Calculate the simple interest on Shs**240,000** for **8** months at a simple interest rate of **15%** per year.

16. Change **36**km/hr to meters per second.

17. Simplify $^{5}/_{6} \div {}^{1}/_{3}$

18. The number of pupils in a certain school increased by **20%** after lockdown to **1080** pupils. How many pupils were in school before lockdown.

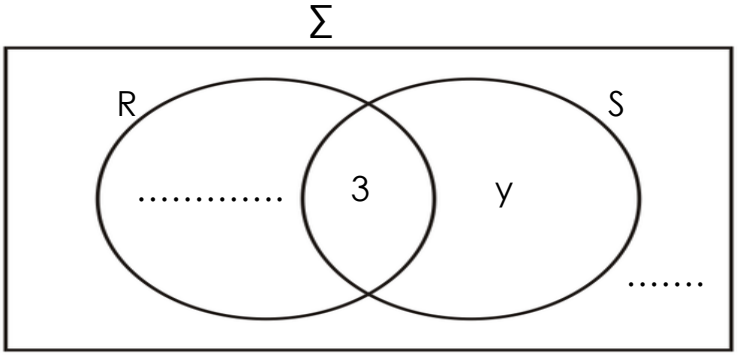
19. The ratio of oranges to mangoes in the basket is **2:3**. If there are **24** mangoes in the basket, how many oranges are in the basket?

20. The average age of **2** women is **46**years. If the **3**rd woman joins them, the average age becomes **44**years. Find the age of the third woman.

SECTION B (60mks)

21. In a village, **3** farmers grow both rice **(R)** and sunflower **(S)**. **24** farmers grow rice and **y** farmers grow sunflower only. **2y** + **9** farmers grow non of the two crops.

a). Complete the venn diagram below using the information above .(2mk)



b). Given that the number of farmers who grow rice only is equal to the number of farmers who grow none of the two crops, find the value of **y**. (2mks)

c). How many farmers grow sunflower**?** (1 mk)

---

22. a). Simplify $\frac{\mathbf{0.75} \times \mathbf{0.25}}{\mathbf{0.65} \times \mathbf{0.4}}$ (3mks)

b) Workout $\frac{\mathbf{1}}{\mathbf{3}} - \frac{\mathbf{1}}{\mathbf{5}}$ of $\frac{\mathbf{5}}{\mathbf{10}} + \frac{\mathbf{2}}{\mathbf{5}}$ (2mks)

23.a) Amos is twice as old as Amon now. In **15** years time, their total age will be **51** years. How old is Amos now? (3mks)

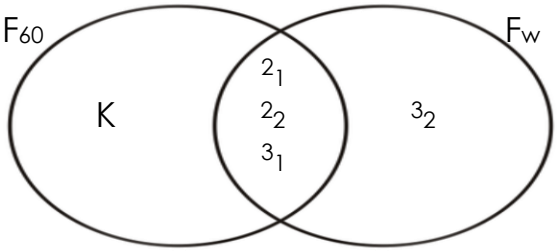
b). How old will Amon be in **20** years time? (2mks)

24. A bus travelled at **120**km/hr for **$1^{1}/_{2}$**hr from Masaka town to Lyantonde town. The bus developed a mechanical problem and covered the remaining distance of **120**km to Mbarara in **$3^{1}/_{2}$**hrs.

a) How far is Mbarara from Masaka? (2mks)

b) Calculate the average speed of the bus for the whole journey. (2mks)

25. Use the venn diagram below to answer the following questions.



a) Find the value of **K** (2mks)

b) Find the value of **W** (2mks)

c) Find the G.C.F of **60** and **w** (1mk)

d) Find the L.C.M of **60** and **w** (1mk)

26. The pupils of P.7 in a certain school sat for test and their scores were recorded as shown in the table below:

Marks(%)	50	30	80	45	60	100
No. of pupils	2	3	4	3	5	1

a). What is the range of marks?(1mk)

b) Workout the mean mark of the pupils who scored above **50**% (2mks)

27. Mr. Mustafa went for shopping in the supermarket and bought the following items.
2kg of meat at **12,000**= per kg.
500gm of salt at Shs**2,400**= per kg.
20 tomatoes at Shs**1,000**= for every **4** tomatoes.
3 bars of soap at Shs**24,000**

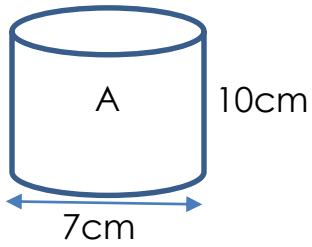
a). Calculate his total expenditure. (5mks)

b). If he went with Shs**65,000**, find his change (1mk)

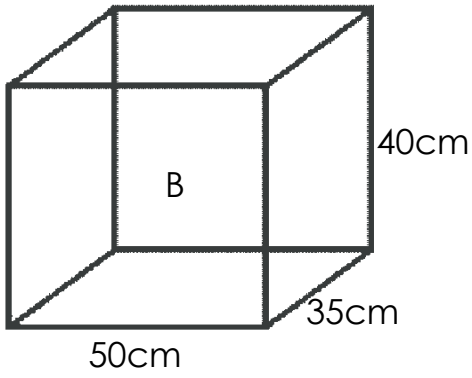
28a). If $\mathbf{102}_{n} = \mathbf{11}_{ten}$. Find base **n**(3mks)

b). Workout $\mathbf{5}^{2x} \times \mathbf{5} = \mathbf{125}$ (2mks)

29. In the factory, small tins of size **A** are packed in a big box of size **B**.

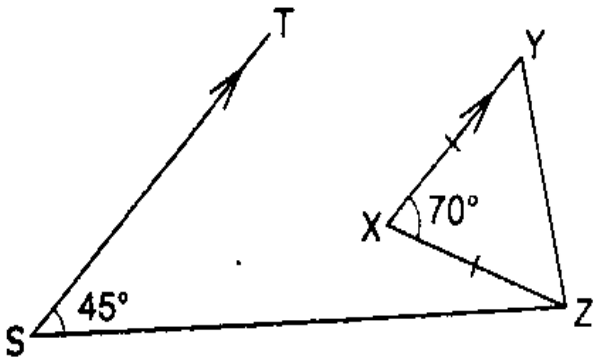


a). How many tins of type **A** can be packed in box **B** (2mks)



b). Calculate the volume of the space left in box **B** after packing all the tins of type **A**. (5mks)

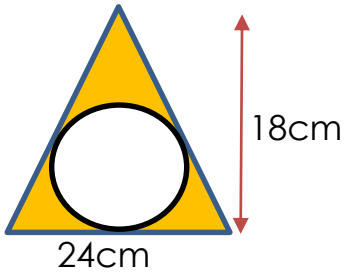
30. In the space below, line **XY** = **XZ** and line **TS** is parallel to line **XY**. Angle **TSZ** = B = **45**° and angle **YXZ** = **70°.** Study the figure and use it to answer the questions that follow. Find the size of angle;



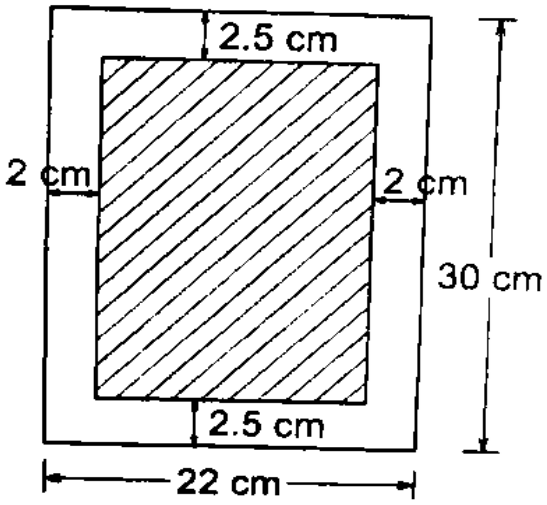
a) **XYZ**.(2mks)

b). **SZX** (3mks)

31. Given that the area of the shaded part in the figure below is **62**cm^2. Find the radius of the circle. (4mks)



32. The figure below represents a photograph enclosed in a photo frame. The length of the photo frame is **30cm** and the width is **22cm**. The area covered by the photograph is shaded. Study the figure and use it to answer the questions that follow.



a). Find the length of the photo graph. (2mks)

b). Calculate the area of the frame not covered by the photograph. (3mks)

BELIEVE YOU **CAN** AND **YOU** WILL