



BROAD EXAMINATIONS®

P.7 MATHEMATICS EXAMINATION

MID - TERM II 2023

Time allowed: 2 hours 30 minutes.

Random No.					Personal No.		

Candidate's Name:

Candidate's Signature:

School Name:

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 and ink. Only diagrams should be done in pencil.
6. Unnecessary crossing of answers will lead to loss of marks.
7. Any handwriting, which cannot be easily read, may lead to loss of marks.
8. Do not fill anything in the boxes indicated for

Examiners' use only.

FOR EXAMINER'S USE ONLY

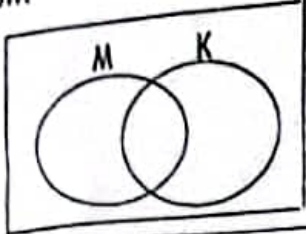
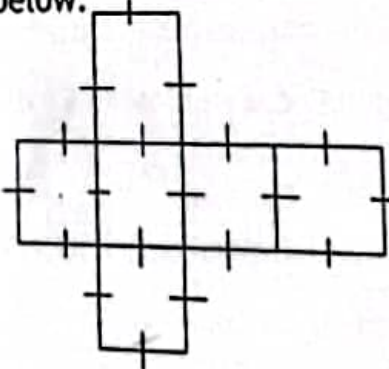
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TOTAL		

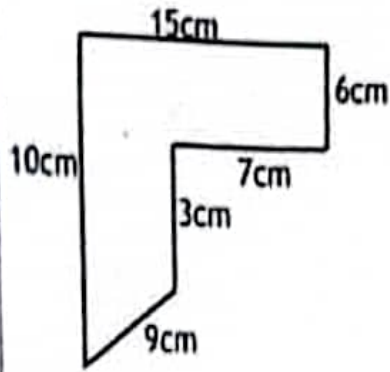

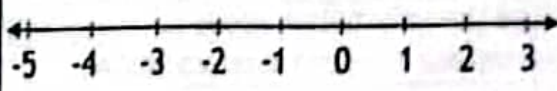
Teacher's comment to the learner

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Approved by:

Team Head Mathematics Dept.

1.	Divide: $12 \div 3$	2.	Write 2.4
3.	Shade $M \cup K$ in the venn diagram below. 	4.	Work out; $1.8 \div 0.03$
5.	Convert 9_{ten} to binary base	6.	Solve: $m - 9 = 15$
7.	A coin is tossed once, what is the probability of getting a tail on top?	8.	Name the shape whose net is shown below. 
9.	Express $\frac{2}{5}$ as a percentage.	10.	The exchange rate of a United States dollar in Uganda is Ug shs. 3,700. Find the cost of a trouser which costs Ug shs. 888,000 in US dollars?

<p>11. Work out the perimeter of the shape below.</p> 	<p>12. Using a ruler, a pencil and a pair of compasses only bisect the line PQ below.</p> 
<p>13. Use "finite set" or "infinite set" to describe the sets below.</p> <p>A set of stars on the sky _____</p> <p>A set of all counting numbers less than 20 _____</p>	<p>14. Work out; $-4 + 6$ using a number line.</p> 
<p>15. Which number was written in standard form to give 2.4×10^{-3}?</p>	<p>16. Simplify: $3(5 - k) - (2k + 7)$</p>
<p>17. A drone car covered 0.08 km in only 10 seconds. Find its speed in m/s</p>	<p>18. Prime factorise 100 and write the answer in set notation.</p>

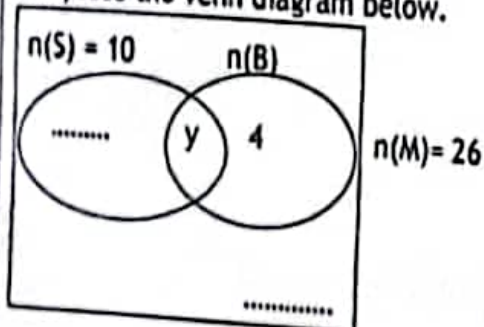
19. Peter can slash the compound in 3 hours. Abdul can slash the same compound in 4 hours. What fraction of the compound can they slash in one hour if they work together?

20. Convert 3500 ml to litres.

SECTION .B. (60 Marks)

21. In a meeting of members, all of them drank Mineral water (M), 10 people drank Soda (S) and Mineral water, 4 drank Beer (B) and Mineral water only, some people drank all the three drinks while 3y drank only Mineral water (M).

(a) Use the information above to complete the venn diagram below.



(b) Find the value of y

(c) How many people drank at least two types of drinks?

22. Given the numeral 27.48. Complete the table below.

Digit	Place value	Value
2	Tens	
7	Ones	7
4		0.4
8	Hundredths	

(5 Marks)

23. (a) Using a ruler, a pencil and a pair of compasses only, construct a rectangle CDEF where line CD = 4cm and DE = 6.4cm.

(b) Measure angle DFE _____

(5 Marks)

24. A man deposited sh. 20,000 in a bank which offers an interest rate of 5%. If he withdrew Sh. 24000 after some time;

(a) Calculate the simple interest he got.

(b)

How long did the money stay in the bank?

25. (a) Study and complete the table below.

Item	Quantity	Unit price	Amount
Grass hoppers	2 cups	Sh. _____	Sh. 14000
Yellow bananas	_____ clusters	Sh. 2500	Sh. _____
Sugar	1½ kg	Sh. 4800	Sh. _____
Total expenditure			Sh. 28700

(b) Amanda bought all the items and was given a change of sh. 1300. How much money did she go with?

(05 Marks)

26. The table below represents a snakes and ladders game board. Use it to answer the questions that follow.

21	22	23	24	25
20	19	18	17	16
11	12	13	14	15
10	9	8	7	6
1	2	3	4	5

(a) Shade all prime numbers in the table.

(b) List all triangular numbers from the table.

(c) Tick all square numbers in the table.

(06 Marks)

27. (a) Work out;

$$4 + 3 = \text{_____ (finite 5)}$$

(b) If today is Monday, what day of the week will it be after 20 days?

(04 Marks)

(b) Calculate the area of the shaded part.

(06 Marks)

31. Allan bought a phone at sh. 200,000 and later sold it to Ian making a profit of 15%. Ian sold the same phone to Cathy at a loss of 20%.

(a) How much money did Ian pay for the phone?

(b) How much loss did Ian make after selling the phone?

(05 Marks)

32. The table below shows the number of Oranges collected by pupils of P.7 from school farm.

No. of Oranges	12	12	8	15	5	8
No. of pupils	3	2	5	4	6	0

(a) If the mean number of Oranges collected was 9, find the value of K?

(b) What is the modal number of Oranges collected?

END

(05 Marks)