



BROAD EXAMINATIONS®

P.7 MATHEMATICS EXAMINATION PRE - PLE TRIAL SET II 2022

Time allowed: 2 hours 30 minutes.

| Random No. | | | | | Personal No. | | |
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| | | | | | | | |

Pupil's Name:

School Name:

District 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 | | |
|-------------------------|-------|------|
| PAGES | MARKS | SIGN |
| Page 2 | | |
| Page 3 | | |
| Page 4 | | |
| Page 5 | | |
| Page 6 | | |
| Page 7 | | |
| Page 8 | | |
| TOTAL | | |

Teacher's comment to the learner

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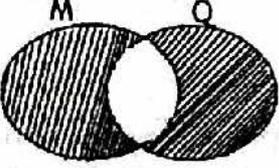
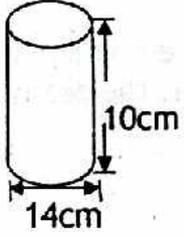
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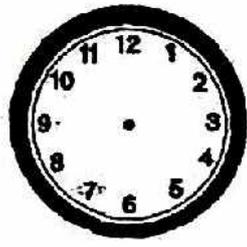
Approved by:

Team Head Mathematics Dept.

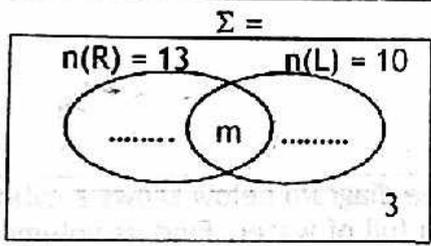
SECTION.A. (40 MARKS)

| | | | |
|----|---|-----|--|
| 1. | Add $22 + 33$ | 2. | Given that set $P = \{m, a, n\}$, list all possible subsets of set P. |
| 3. | Expand 436 using place values. | 4. | Convert 4.5m to centimeters. |
| 5. | Find the Lowest Common Multiple of 12 and 15. | 6. | Work out: $\frac{1}{5} + \frac{3}{15}$ |
| 7. | Draw a symbol for a right angle below | 8. | Manager issued out receipts to customers from receipt number 3486 to 3496. How many receipts did he issue out? |
| 9. | Increase 120 pupils in the ratio of 5:3. | 10. | Given that $a = 6$, $b = 8$ and $c = 4$. Find the value of $\frac{2ab}{c}$ |

| | |
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| <p>11. Arrange -4, -3, 0, -1 and +5 in ascending order.</p> | <p>12. A cyclist moved from town A to town B at a speed of 30km/hr in just 2 hours. How far is town A from town B?</p>  |
| <p>13. Describe the shaded region below.</p>  | <p>14. If  represents 6 cups, draw pictures to represent 3 dozens of cups.</p> |
| <p>15. Using a ruler, a pencil and a pair of compasses, construct an angle of 165°.</p> | <p>16. The diagram below shows a cylindrical tin full of water. Find its volume</p>  |
| <p>17. Write 0.125 as a vulgar fraction in its simplest form.</p> | <p>18. Solve for x in $5 - x = 7$</p> |

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| <p>19. Show "a quarter to 6 o'clock" on the clockface below.</p>  | <p>20. Amos scored the following marks in different series of tests; 18, 11, 22, 9, and 15. Workout his range of the marks scored.</p> |
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SECTION B: (60 MARKS)

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|---|--|
| <p>21. In a school football team, 13 members play with the right leg(R), 10 members use the left leg (L), some team members use both legs while 3 do not play at all. Use the information to complete the ven n diagram below.</p>  | |
| <p>(a) How many team members play with both legs given that the team consists of 22 members?</p> | <p>(b) How many members play with only one leg?</p> <p align="right">(6 marks)</p> |

| | |
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| <p>22. Given the numeral 483.05</p> <p>(a) Write the place value of 4.</p> | <p>(b) Find the value of 8 and the value of 5.</p> |
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(c) Find the sum of value of 8 and the value of 5.

(5 marks)

23. Town V and town W are 200km apart, if a truck driver takes $2\frac{1}{2}$ hours to drive from town V to town W, find the speed at which the truck moves.

(b) Jamil covered 320 metres at speed of 40m/s. How long did the journey take?

(5 marks)

24. In a class of 80 pupils, $\frac{3}{5}$ are girls and the rest are boys.

(a) Find the fraction for boys.

(b) How many girls are in the class?

(c) If $\frac{1}{4}$ of the boys do not have full school uniform and $\frac{1}{3}$ of the girls have full school uniform, how many pupils have full school uniform in the class?

(6 marks)

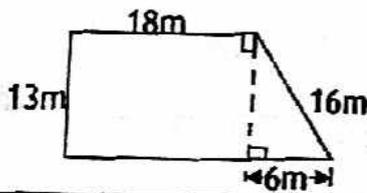
25. Shamirah went shopping on Idi with sh. 50,000 and bought the following items.
 2kg of meat at sh. 12000 @ kg
 1½ kg of rice at sh. 4000 @ kg
 2.5 litres of cocacola soda at sh. 5,500.
 500g of onions at sh. 3600 per kilogram.

(a) How much money did she pay altogether?

(b) If she was given a discount of 10%, how much change did she get?

(5 marks)

26. Study the figure below and use it to answer the questions that follow.

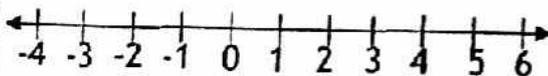


(a) Work out its area.

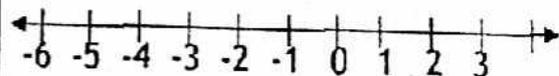
(b) Work out the distance around the figure above.

(4 marks)

27. (a) Simplify the following using a number line.
 $-3 + +7$



(b) $-5 - -2$



| | | |
|-----|---|--|
| 28. | Matayo deposited sh. 600,000 in a SACCO that offers an interest rate of 3% p.a. If he withdrew his money after 5 years, | |
| (a) | How much interest did he receive? | (b) Calculate the total amount of money he received after 5 years. |

(4 marks)

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| 28. | (a) Using a ruler, a pencil and a pair of compasses, construct rectangle HENS where line HE = 6.5cm and line EN = 4cm. |
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| (b) | Measure diagonal ES. |
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(5 marks)

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| 30. | Two bells rang at intervals of 15 minutes and 25 minutes. If they ring together at 11:45a.m; | |
|-----|--|--|

| | | |
|-----|---|---|
| (a) | After how long will they ring together again? | (b) At what time will they ring together again? |
|-----|---|---|

(5 marks)

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| 31. Mercy is thrice as old as Peter. If the difference in their age is 18 years, | |
| (a) How old is Peter? | (b) How old was Mercy 12 years ago. |
| (5 marks) | |

32. The information below shows the number of animals on Mr. Alinethu's farm.
 Cows \Rightarrow 13
 Goats \Rightarrow 16
 Others = 7
 Using a radius of 3.5cm, construct a pie chart showing the above information.

(6 marks)

END