

EDUCATION SOURCE EXAMINATION BOARD 2024

PLE MOCK EXAMINATION 2024

SUBJECT : MATHEMATICS

CLASS : P.7

DURATION: 2 HOURS 30 MINUTES

TARGET
MARK

Index No.

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

Candidate's Name

Candidate's Signature

EMIS No.

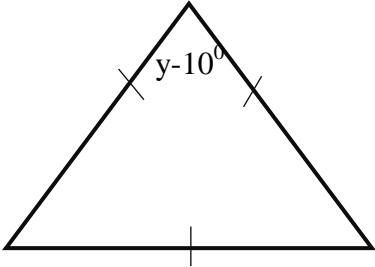
District Name

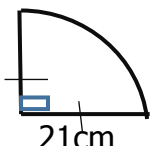
Read the following instructions carefully

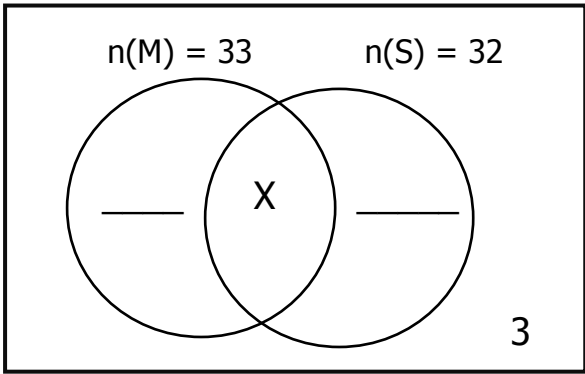
1. This paper has **two** Sections: **A** and **B**.
2. Section **A** has 20 answer questions (40 marks)
3. Section **B** has 12 questions (60 marks)
4. Answer **ALL** questions. Answers to both sections must be written in the spaces provided.
5. All answers must be written using a blue ballpoint pen 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 box indicated for examiner's use only.

| FOR EXAMINERS USE ONLY | | |
|---------------------------|------|--|
| QN. NO. | MARK | |
| 1 - 10 | | |
| 11 - 20 | | |
| 21 - 22 | | |
| 23 - 24 | | |
| 25 - 26 | | |
| 27 - 28 | | |
| 29 - 30 | | |
| 31 - 32 | | |
| TOTAL | | |

SECTION A (40 Marks)

| | | | |
|----|--|----|---|
| 1. | Work out: $595 - 373$ | 6 | The cost of $\frac{1}{2}$ kg of posho is sh. 1200. What will be the cost of $6\frac{3}{4}$ kg of posho? |
| 2 | Write 407. 32 in words without using the word point. | 7 | Using a ruler, a well sharpened pencil, construct angle of 105° |
| 3 | Solve: $\frac{3m^2}{4} = 12$ | 8 | Given that set $K = \{\text{All composite numbers less than 12.}\}$ How many subest can be obtained from k? |
| 4 | Find the range of the next two numbers in the sequence: 8, 10, 15, 17, 22, 24, _____, _____ | 9 | Job travelled from Iganda to Malaba a distance of 120km at a speed of 40km/h. If he left Iganga at 8:00a.m, at what time did he arrive at Kisoro? |
| 5 | Find the value of angle y  | 10 | The mean of a (a-1) and (a-2) is 5. Find the value of a . |

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|----------------|---|----|---|
| 11 | Find the multiplicative inverse of 0.3. | 16 | Sarah is facing East. What will be her new direction if she turns anti clockwise through an angle 225° ? |
| 12 | In a class, the probability of picking a boy child to be a class monitor is $\frac{4}{7}$. If the class has 56 pupils how many girls are in the class? | 17 | Work out: $2 \div 5 = \text{____}(\text{mod}9)$ |
| 13 | The median of 5 consecutive integers is -3, find their range. | 18 | What base four numeral is equivalent to 58 ten? |
| 14 | Express 0045 hours in a 12 hour clock system. | 19 | Given that $F_{48} = \{2_1, 2_2, 2_3, 2_4, x\}$. Find the value of x. |
| 15 | Find the perimeter of the figure below.  | 20 | Allan planted 20 trees at intervals of 0.5m along a straight line. How long was the line? |
| Section | | | |

| | | | | | | | | | | | | | | | | | |
|----|--|-------|-------|---|---|---|---|-------|-------|---|---|---|-------|---|-------|---|-------|
| 21 | <p>In a class of 60 pupils, 33 like Mathematics (M) and 32 like Science(S). Given that each pupil likes English, study and complete the venn diagram the venn diagram below.</p> <p>a.</p> <div style="text-align: right;">(2mks)</div> <div style="text-align: center;">$N(\mathcal{E}) = n(E) = 60$ </div> | | | | | | | | | | | | | | | | |
| b) | <p>Find the value of x.</p> <div style="text-align: right;">(2mks)</div> | | | | | | | | | | | | | | | | |
| c) | <p>How many pupils like only two subjects?</p> <div style="text-align: right;">(1mk)</div> | | | | | | | | | | | | | | | | |
| 22 | <p>Write a single number whose standard form is 8.02×10^{-3}</p> <p>a.</p> <div style="text-align: right;">(2mks)</div> | | | | | | | | | | | | | | | | |
| b. | <p>Fill in the missing values in the table in base five. (1mk)</p> <table border="1" data-bbox="194 1480 735 1756"><tr><td>+</td><td>2</td><td>1</td><td>4</td></tr><tr><td>2</td><td>4</td><td>_____</td><td>_____</td></tr><tr><td>1</td><td>3</td><td>2</td><td>_____</td></tr><tr><td>3</td><td>_____</td><td>4</td><td>_____</td></tr></table> | + | 2 | 1 | 4 | 2 | 4 | _____ | _____ | 1 | 3 | 2 | _____ | 3 | _____ | 4 | _____ |
| + | 2 | 1 | 4 | | | | | | | | | | | | | | |
| 2 | 4 | _____ | _____ | | | | | | | | | | | | | | |
| 1 | 3 | 2 | _____ | | | | | | | | | | | | | | |
| 3 | _____ | 4 | _____ | | | | | | | | | | | | | | |

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| 23 | <p>Simplify:</p> <p>a. $\frac{2}{3} \div \frac{1}{4} + (\frac{1}{2} - \frac{2}{5})$</p> <p style="text-align: right;">(3mks)</p> |
| b. | <p>Tap X can fill a tank in 6 minutes and tap Y can fill the same tank in 8 minutes. If the two taps fill 2100 litres in one minute, find the capacity of the tank.</p> <p style="text-align: right;">(2mks)</p> |
| 24 | <p>Find the number for the expansion below.</p> <p>$(3 \times 10^2) + (4 \times 10^1) + (2 \times 10^0) + (5 \times 10^{-2}) + (7 \times 10^{-3})$</p> <p style="text-align: right;">(2mks)</p> |
| b. | <p>Find the quotient of the values of 4 and 5 in number in (a) above.</p> <p style="text-align: right;">(2mks)</p> |
| c. | <p>Write the above number in (a) in words.</p> <p style="text-align: right;">(1mk)</p> |
| 25 | <p>Use a numberline to work out : $-6 - +4$</p> <p style="text-align: right;">(2mks)</p> |

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| b. | Majok went to London on Friday, 3 rd March, 2019. He came back on 8 th June the same year. On which day of the week did he come back? < |
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(3mks)

(2mks)

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|----|---|
| b) | A book costs twice as much as a pen and a geometry set costs sh. 1800 more than a book. If the total cost of all the three items is Ugsh. 7800. Find the cost of each item. <div style="text-align: right;">(3mks)</div> |
|----|---|

The graph illustrates the distance from Kampala to Luwero over time. The vertical axis represents distance in kilometers, with markers at 0 (Kampala), 20 (Bombo), and Luwero. The horizontal axis represents time from 1pm to 7pm. The distance starts at 0 km at 1pm, increases linearly to 20 km at 2pm, remains constant at 20 km until 3pm, then increases linearly to Luwero at 4.5pm. It remains at Luwero until 5.5pm, after which it decreases linearly back to 0 km at 7pm.

| Time | Distance (km) |
|-------|---------------|
| 1pm | 0 (Kampala) |
| 2pm | 20 (Bombo) |
| 3pm | 20 (Bombo) |
| 4.5pm | Luwero |
| 5.5pm | Luwero |
| 7pm | 0 (Kampala) |

