EDUCATION SOURCE EXAMINATION BOARD 2024
P.7 MAY HOLIDAY PROGRAM SET ONE, 2024

SUBJECT   :   MATHEMATICS
DURATION :   2 HOURS 30 MINUTES

Name_____

Index Number:

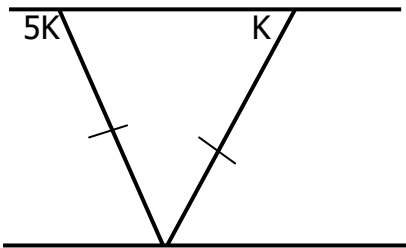## Read the following instructions carefully

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 or black 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.

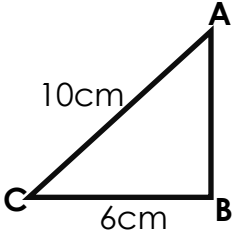8. Do not fill anything in the box indicated for examiner's use only.
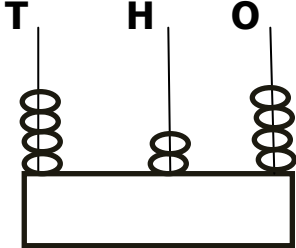
FOR EXAMINERS USE ONLY		
QN. NO.	MARK	
1 - 10		
11 - 20		
21 - 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 – 32		
TOTAL		

WHAT'S APP @ : 0779680288 / 0756400218

SECTION A

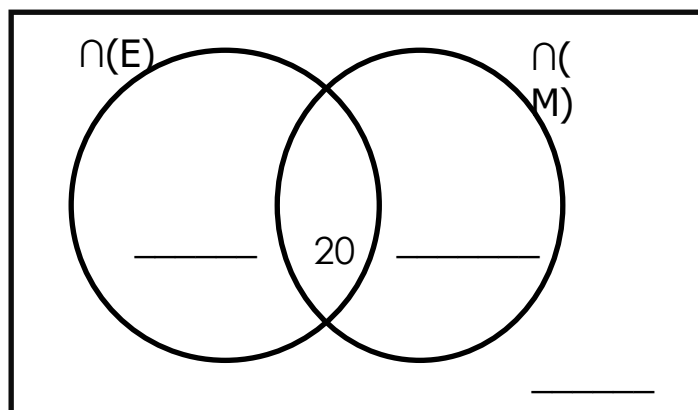|			
1.	Workout: 15 + 85	6	10 girls take 20 minutes to sing a song. How long will 5 girls take to sing the same song?
2	Write 45,001 in words.	7	Find the value of K in diagram below.
3	Given that K = (4,6,8,9,10). Find the number of proper subsets in K.	8	Solve for P; $\dfrac{2p}{3} = 6$
4	Find the next number in the sequence below. 16, 12, 13, 9, 10, 6,_____	9	Which number has been expanded to give, $(4 \times 10^3) + (1 \times 10^2) + (2 \times 10^0)$?
5	Calculate the cost of 3 plastic chairs if the cost of 5 similar chairs is 9000/=.	10	Simplify; $^+2 - {}^-2$

11	Alice had a piece of cake. She gave ¼ of the cake to her brother and ½ of the remainder to her young sister. What fraction of the cake did she remain with?	16	Change 3 hours into seconds.
12	Calculate the area of the figure below. 10cm C 6cm B A	17	Subtract 3x-2 from 8x + 5
13	If ⚽ represents 25 balls how many balls will ⚽⚽⚽ represent?	18	Find the product of the value of 3 and the place value of 2 in the number 3628.
14	Express 0.4545---as a vulgar fraction.	19	Write MC in Hindu Arabic numerals.
15	Loy bought a shirt at 25000/= and later sold it at a loss of 8000/= Calculate her percentage loss.	20	Write the number shown on the abacus below in words. **T** **H** **O**

| 21	In a class of 55 pupils, 25 like English (E)y like Mathematics (M) only, 20 pupils like both English and Mathematics 5 pupils do not like any of those two subjects. Complete the venn diagram below using the given information above. $\cap(E) = 55$ $\cap(E)$ $\cap(M)$ ——— 20 ——— ——— (3mks)
b.	Find the value of y. (2mks)
22	Workout: $\dfrac{0.45 \times 0.12}{0.09 \times 0.5}$ (3mks)
b.	Simplify; $2\frac{1}{2} \times \frac{1}{5} \div \frac{3}{4}$ (3mks)
23.	In Mengo Hospital, three patients were asked to swallow tablets at different intervals. The first patient was to swallow every after 9 minutes the second after every after 12 minutes and the other after every 15 minutes. If the three patients swallowed their first tablets together at 10:30a.m, at what time did they next swallow together?

		(4mks)
24	Study the table below and use it to answer the questions that follow.	

Marks	84	70	91	80	95
Number of pupils	1	2	4	2	1

a. How many pupils did the test?

(1mk)

b. Find the modal frequency.

(1mk)

c. Workout their average score.

(2mks)

25 A bus travelling at 55km/her took 4 hours to cover part of the journey. The rest of the journey of 80km was covered at a speed of 40 km/hr. How long was the journey?

(3mks)

b. Find the average speed for the bus for the whole journey.

(2mks)

26 The average height of 3 boys is 100cm. If the height of one of them is 40cm. find the average height of the other two boys.

(2mks)

b. Solve: 2(3y + 2) − (3y-6) = 25

	(3mks)
27 a)	Mr. Kapere spent $^2/_3$ of his salary on food, ¼ of the remainder on paying school fees and saved sh. 120,000. Find Mr. Kapere's salary.

(2mks) |
| b. | Tap a takes 6 minutes to fill the tank and tap B takes 8 minutes to draw out water from the tank. How long will it take to fill the tank if both taps are opened at the same time?

(2mks) |
| 28 a. | Jane bought the following items from the super market 3kg of sugar at sh. 3200 per kg 1 ½ kg of rice at sh. 3000 and 15 apples at sh. 2000 for 3 apples. How much did she pay for all the items?

(3mks) |
| b. | If Jane was given a discount of sh. 1500. How much did she pay for the items?

(1mk) |
| 29 | Using a ruler and a pair of compasses only construct a rectangle PQRS where PQ = 8cm and QR = 6cm. |

		(4mks)
b.	Measure PR	(1mk)
30	The diagonals of a rhombus are 8cm and 6cm. Find the area of the rhombus.	(2mks)
b.	Workout its perimeter.	(3mks)
31	Mr. Kanaabi gave a test of 20 questions and awarded 2 marks for each correct answer given and deducted a mark for each answer got wrong. If a pupil got 13 questions correct, what mark did the pupil get?	(3mks)
b.	If a pupil obtained 34 marks. How many questions did the pupils get wrong?	

	(3mks)
32	The pie chart below shows how Mrs. Jogo spends her income of sh. 360,000. Use it to answer questions that follow.
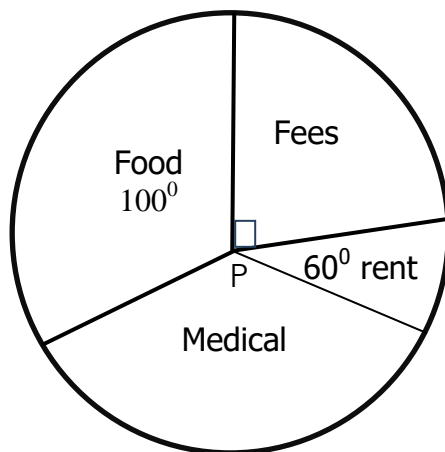
 |
| a. | Find the value of p.

(2mks) |
| b. | How much more does she spend on medical than fees?

(3mks) |

END