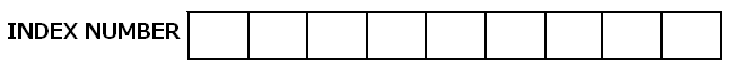
CREATIVE EDUCATIONAL SERVICES

**P.7 PRE- MOCK EXAMINATIONS 2024**

**MATHEMATICS**

***Time allowed: 2 Hours 30 Minutes***



**Candidate’s Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Candidate’s Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**School’s EMIS Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**District Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Read the following instructions carefully**

1. The paper has two sections: A and B.
2. All the working for both sections A and B must be shown in the spaces provided.
3. All working must be done using a blue or black ball – point pen or fountain pen. Diagrams must be drawn in pencil.
4. Un necessary changes of work may lead to loss of marks.
5. Any handwriting that cannot easily be read may lead to loss of marks.
6. Do not fill anything in boxes indicated: **“For Examiners’ Use Only**: and those inside the question paper

|  |  |
| --- | --- |
| **SECTIONS** | **MARKS** |
| **SECTION A** |  |
| **SECTION B** |  |
| **TOTAL** |  |

**SECTION A: 40 MARKS**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Work out: 50 ÷ 10 |  | Express 97 in Roman Numerals |
|  | Given that a=-2, b=3 and c=4. Find the value of b(a2 + c) |  | Given that set K = {a, b, c, d, e, f} and set M = {a, c, e, g, h}. find n(KnM) |
|  | Simplify: 7m – g – 5m – 4g |  | Find the value of 23 + 50 - 32 |
|  | How many factors does 24 have? |  | Work out: 0.042 ÷ 0.06 |
|  | Using a pair of compass, a pencil and a ruler only, construct an angle of 750 in the space provided below. |  | A film which took 1 ¾ hours ended at 4:20pm. At what time did it start? |
|  | Round off 4993 to the nearest hundreds. |  | Given that a = 3, b = 4 and c = 0.8, find the value of ab  c |
|  | Find the perimeter of the figure below. (Take π as 22/7)  14m |  | A trader bought a pair of shoes for shs.30,000. He sold them at a profit of 35%. What the selling price of the shoes? |
|  | Find the mode of the following numbers.  9, 12, 9, 5, 7, 12, 9 |  | Find the square root of 2 |
|  | A car travels 153km in 2 hours 15minutes. Calculate its average speed in km/hr. |  | The exchange rate in a bank is Ug.sh.3,600 to one US dollar($). How many dollars are equivalent to Ugsh.108,000? |
|  | In the figure below, find the size of angle K.  500  K0 |  | Calculate the volume of the box below.  10cm  9cm |
| **SECTION B: 60 MARKS** | | | |
|  | 1. Write the number whose standard form is 3.14 x 103 (2mks) 2. Work out: (7.5 x 27) + (7.5 x 73) (2mks) | | |
|  | In a class of 60 girls, 41 like mathematics (M) and (2k+2) like Science (S) only. 19 girls like both Mathematics and Science while 3 do not like any of the two subjects.   1. Use the information above to complete the Venn diagram below. (2mks)   n(∑) = 60  n(M)=41 n(S)=\_\_\_\_\_    \_\_\_\_\_\_ 19 2k+2  3   1. Find the value of k. (2mks) 2. Find the number of girls who like science. (1mk) | | |
|  | Sarah bought the following items from a market;  2 loaves of bread at sh.4,200 per loaf.  2 ¼ kg of meat at sh.12,000 per kg.  2 ½ litres of milk at sh.1,500 per half litre.   1. Find her total expenditure (4mks) 2. If she had a 50,000 shilling note, what was her change? (1mk) | | |
|  | Using a pair of compasses, a pencil and a ruler only, construct a triangle ABC in which BC = 7cm, angle ABC = 600 and angle BCA = 450.   1. Draw a perpendicular from A to meet BC at x. (5mks) 2. Measure AX. (1mk) | | |
|  | 1. After a decrease of sh.50,000, Kato’s salary became sh.450,000. What was the percentage decrease? (2mks) 2. A shop keeper bought 60 handkerchiefs for sh.125,000 and sold them at sh.3,000 each. Calculate his percentage profit. (3mks) | | |
|  | 1. Find the solution set for 3 + 4m 12 + 3m (3mks) 2. Solve the equation: 5(4-2k) = 4(2k-4) (3mks) | | |
|  | Study the figure below and use it to answer the questions that follow.  C:\Users\SCH\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\20190823_141658.jpg   1. Find the value of m. (3mks) 2. Work out the size of angle QRP. (2mks) | | |
|  | 1. Write 10111two in base ten. (2mks) 2. What number has been expanded to give;   (9x100,000) + (5x1000) + (7x100) + (4x1)? (2mks) | | |
|  | The diagram below shows a rectangular floor of a room 20m long and 18m wide. It is covered with a carpet. The area covered with a carpet is shaded. Stdy it and use it to answer questions that follow.  C:\Users\SCH\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\20190823_142305.jpg   1. Find the length and width of the carpet. (2mks) 2. Calculate the area of the floor that is not covered with the carpet. (3mks) | | |
|  | The table below shows the ages of children in a family.   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | Age in years | 3 | 4 | 6 | n | 8 | 10 | | No. of children |  |  |  |  |  |  |  1. How many children are in the family? (2mks) 2. If the mean age is 6 years, find the value of n. (3mks) | | |
|  | Okello sells ½ of the daily milk collection from his farm. He gives 2/5 of the remaining amount of milk to his parents and remains with 9 litres for his family. How many litres of milk does he collect daily? (5mks) | | |
|  | The graph below shows the number of children absent from school on each day of the week.  C:\Users\SCH\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\20190823_144029.jpg   1. How many children were absent on Wednesday? (1mk)   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   1. How many more children were absent on Monday than on Friday? (2mks) 2. Express the number of children absent on Thursday as a percentage of the total number of children absent in the week. (2mks) | | |

**END**