

## Mid Year Examination 2015

### Mathematics

Grade 08

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Time: 2 hours

Name/ Index No.

#### Part I

- Answer all questions on paper itself.

01 The price of 1m of cloth is Rs. 175.50. Find the price of 5m of cloth.

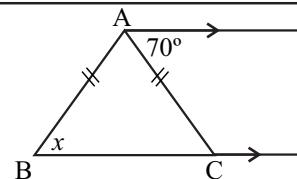
02 Write 1.95 as a fraction and simplify it.

03 Find 48% of Rs. 500.

04 How many symmetrical axis are there in the letter "O" ?

05 If  $65 \times 32 = 2080$ , find the value of  $6.5 \times 3.2$

06 Find the value of  $x$ .



07 Fill in the blank using a suitable symbol.

3 ..... { multiples of 5 }

08 Build up an equation for the following expression.

"A number multiplied by 3 and added 4 is equal to 9."

09 The weight of three parcels are 1.5kg, 750g and 1kg. Write the ratio of the weight of the parcels.

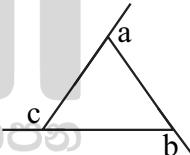
10 The area of the rectangular is  $60\text{cm}^2$  and the length is 12cm. Find the breadth of the rectangular.

11 Denote 1m 25cm as a percentage of 2m.

12 Solve the equation  $3x + 4 = 10$

13 How many packets of sugar  $2\frac{1}{2}$  kg can be prepared using 75kg of sugar ?

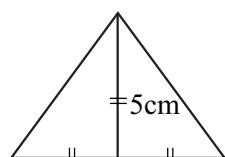
14 Find the value of  $a + b + c$  in the given figure.



15 When Rs. 400 is divided in the ratio  $5 : 3$ , how much is the greater portion ?

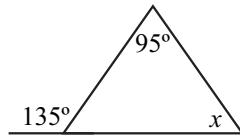
16 Write the set of the letters of the word "MATHEMATICS."

17 Find the area of the given triangle.



18 Simplify. 
$$\frac{2.5 + 1.7}{0.2}$$

19 Find the value of  $x$  in the given figure.



20 A rope is 8m long. How many  $\frac{1}{5}$  m parts can be cut from it?

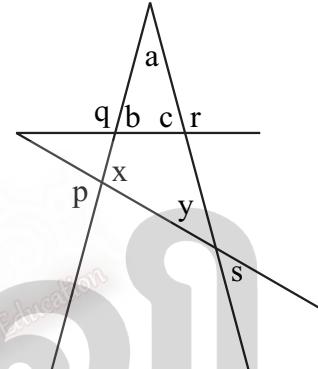
(2 x 20 = 40)

### Part - II

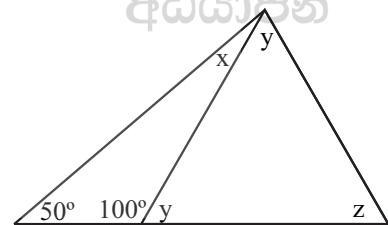
● Answer first question and four other questions. 16 marks in first question and 11 marks in each other questions.

01 (a) Provide answers to the following questions according to the data given in the figure.

- What is the value  $(a + b + c)$ ?
- What is the value  $(x + y + a)$ ?
- Obtain a relation between the values of  $(b + c)$  and  $(x + y)$ .
- Find the value of  $q$  using  $b$ .
- Find the value of  $r$  using  $c$ .
- Find the value of  $(p + q + r + s)$  using  $b$ ,  $c$ ,  $x$  and  $y$ .
- Find the sum of the magnitudes of the angles  $p$ ,  $q$ ,  $r$  and  $s$ .



(b) Calculate the values of the Angles given by algebraic symbols  $x$ ,  $y$  and  $z$  of the following triangle.



02 (a) The sum of three numbers is 66. The second number is twice the first number. The third number is three times the first number.

If the first number is  $x$ .

- Find the second number and the third number using  $x$ .
- Build up a equation using the data above.
- Solve the equation and find three numbers.

(b) Solve the following equation.  $5x - 2(x - 4) = 4x$

03 (a) Convert the denominator to a whole number and divide  $0.231 \div 0.11$

(b) Chamara buys a chicken of weight  $1\frac{1}{2}$  kg and he cooked  $\frac{3}{4}$  of it. Find the remaining weight of the chicken later he used to cook.

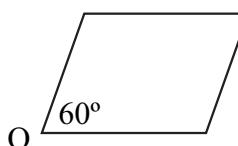
(c) A person requires  $\frac{2}{5}$  kg of sugar for 6 days. If he use same amount of sugar each day, how much of sugar will he require for a day ?

(d) Mr. Rohan needs 4.5l of petrol to his car for a day. Find the amount of petrol he required for 5 days.

04 (a) Complete the table given below.

Diagram	No. of axes of symmetry	Order of rotational symmetry	When rotating 360° which angles does it concedes
Square			
Equilateral triangle			
Rectangle			

(b) Draw the figure obtain when the following figure is rotated  $30^\circ$  clock wise around O.



05 According to the information indicated by a venn diagram as follows and answer the questions.

(a) (i) Write the elements of set A with in double brackets.  
(ii) Write an universal set suitable for set A.  
(iii) Write "6 is an element of A" using symbols.  
(iv) Find  $n(A)$  in the above venn diagram.  
(v) Write an example for a set in which  $n(A) = 0$

(b) Write the set of numbers in the set A  
(i) as a description (ii) as a list

06 (a) Find the area of the following figure.

(b) The internal length, width, height of a water tank are 4m, 3m and 1.5m respectively. If the cost for the paint and labour charge are Rs. 30 and Rs. 40 per square meter respectively. How much will it cost to apply paint on the inside and the out side of the walls.

07 (a) A man paid 4% of the amount received by selling his vehicle as broker charges. He was left with only Rs. 720000.  
(i) Find the price for which he sold his vehicle.  
(ii) What is the broker charge in Rupees ?

(b) When a certain sum of money was divided among A, B and C in the ratio  $5 : 3 : 4$ . B got Rs. 750. Find  
(i) the amount of money C will get (ii) the total sum of money

(c) 20% of a certain amount of money was Rs. 375. Find the value of 65% of this amount.

