



Zonal Education Office - Vadamaradchy

Second Term Examination - 2019

Grade: 07

Mathematics

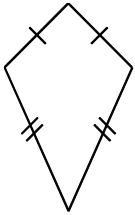
Time: 2.00 Hrs

Index No:

Part- I

◆ Answer all questions on paper itself.

01.



Write the number of axes of symmetry of the given figure?

02. $A = \{ \text{digits of the number } 1000 \}$ Write down the set A by listing its elements.

03. Simplify. $12 + 7 \times 9$

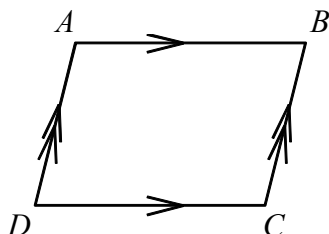
04. 9 divides the number $71 \square 4$. Suggest a digit suitable for empty box.

05. Write five to the power two in index notation and find the value of it.

06. (1) To which decade does 2019 belong?

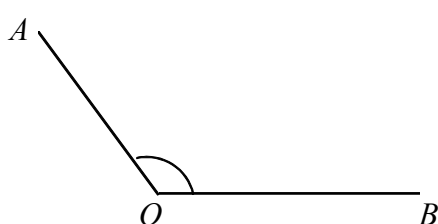
(2) To which century does 2019 belong?

07.



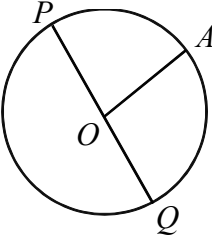
Name two pairs of parallel lines.

08.

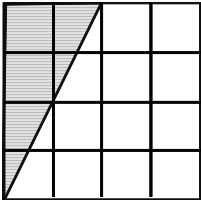


Measure and write the magnitude of \hat{AOB}

09. What is the largest unit fraction?
10. Express $1\frac{2}{5}$ as a decimal number?
11. Three times of a certain number x is subtracted from 10, Construct an algebraic expression to represent this information?
12. Write $1.05g$ in grams and milligrams.
13. What is the name of a quadrilateral with exactly one pair of parallel sides.
14. Solve. $3x - 2 = 13$
15. Arrange in ascending order. $80m, 0.1km, 95cm$

16.  Centre of a given circle is O. Name the radius and diameter of the circle.

17. The volume of the Cool drink in a bottle is $650ml$. Give the total amount of cool drink in 10 such bottles.
18. Find the largest number which divides 18, 12 and 30 without remainder.

19.  Find the shaded part as a fraction of whole figure.

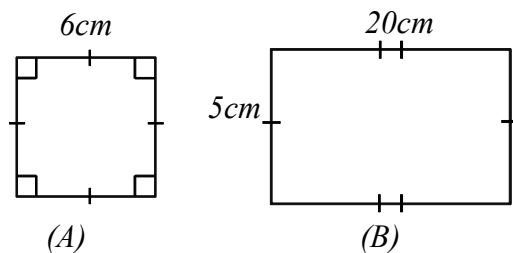
20. Write all prime factors of 36.

($20 \times 2 = 40$ marks)

Part - II

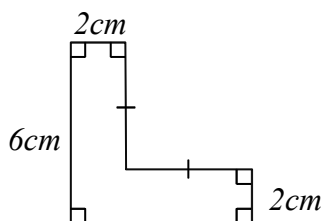
◆ Answer first question and another four questions.

01. (a) i) Find the area of the following figures A and B



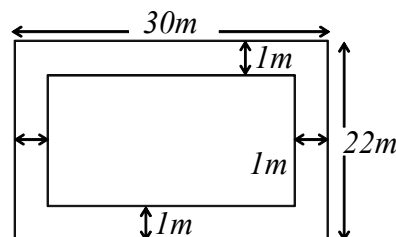
- ii) Find the perimeter of the above figures A and B.
 iii) Find the side of a square whose area is equal to the area of the figure (B)

(b) 1) Find the area of the given compound figure.



2) The rectangular swimming pool is located in the middle of a rectangular land of 30m long and 22m width as shown in the figure. The grass is grown around a metre wide.

- i) Find the total area of the land
 ii) Find the length and width of the swimming pool
 iii) Find the area of swimming pool
 iv) Find the area of grass land.



(2+2+2+3+2+2+2+1 = 16 marks)

02. a) i) Express $19\frac{3}{4}$ as a mixed number.

ii) Express $2\frac{3}{7}$ as an improper fraction.

iii) Fill in the blanks. $\frac{6}{18} = \frac{5}{\square}$

b) Simplify

(i) $\frac{2}{7} + \frac{1}{14}$

(ii) $2\frac{3}{5} - 1\frac{2}{5}$

c) Fill in the blanks with the suitable symbol from $>$, $<$ and $=$.

(i) $\frac{8}{9} \square \frac{2}{5}$

(ii) $3\frac{1}{7} \square 3\frac{11}{12}$

(1+1+2+2+3+1+1 = 11 marks)

03. a) Express each of the following fractions as a decimal number.

(i) $\frac{38}{100}$

(ii) $\frac{1}{8}$

b) Simplify

(i) $(-8.3) + (+2.5) + (+6.1)$

(ii) $5 - 0.4$

(iii) 0.073×100

(iv) $6.24 \div 3$

c) Compare the following decimal numbers using $>$, $<$, or $=$.

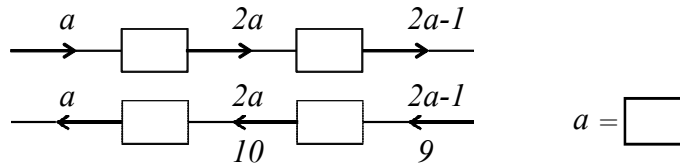
(i) -41.7 10.5

(ii) 0.04 1.004

d) Represent 4.032 on an abacus.

(1+1+1+1+1+2+1+1+2 = 11 marks)

04. a) (i) Complete the flow diagram to solve the equation $2a - 1 = 9$.



(ii) Find the value of each of the algebraic expressions given below when $a = 2$ and $b = 3$

(1) $a + b - 2$

(2) $\frac{3b - a + 5}{4}$

b) Kumar took 6 string hoppors at Rs. x per each and curry worth Rs.25 for break fast.

(i) Write an algebraic expression for the total amount spent by Kumar.

(ii) If the cost of breakfast is Rs.115, construct an algebraic equation.

(iii) Find the cost of a string hopper by solving this equation.

(2+1+2+2+2+2 = 11 marks)

05. (i) Draw a straight line segment of 5cm long name it AB.

(ii) Draw two circles of radius 4cm with centres A, B

(iii) Name the intersection points of the two circles as x and y.

(iv) Write the name of the figure obtained by joining the point in the order A, X, B, Y and A.

(v) What is the relationship between the lengths AX and BY. What is the special name of AX and BY.

(2+2+2+3+2 = 11 marks)

06. a) In a box of 500g weight, there are 3 milk packets each weight 400g, 4 sugar bags each weight 400g and 5 tea packets each weight 150g.

(i) Find the weight of 3 milk packets

(ii) Find the total weight of the box.

b) The length of a rectangle is 5cm more than the breadth. If the breadth is 3cm, find the perimeter of the rectangle.

(c) Simplify

$$\begin{array}{r} km \quad m \\ 5 \quad 40 \\ - 2 \quad 500 \\ \hline \hline \end{array}$$

(ii) $12cm \ 8mm \times 5$

(iii) $12m \ 8cm \div 8$

(2+2+2+2+3 = 11 marks)