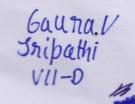
Amity (PV)



Mid Term Exam - 2017-2018

Class - VII

Subject - MATHEMATICS

Time: 3 Hours

Max. Marks: 80

General Instructions

- 1. This question paper consists of 4 sections.

 Section-A contains 10 questions of 1 mark each.

 Section-B contains 8 questions of 2 marks each.

 Section-C contains 10 questions of 3 marks each.

 Section-D contains 6 questions of 4 marks each.
- 2. All questions are compulsory.
- 3. Draw neat and labeled diagrams wherever necessary.

SECTION - A

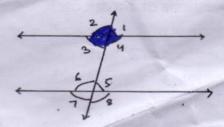
1. Arrange the following integers in descending order:

- 2. Find the product of (-45) x (-20) x (113)
- 3. Multiply: $\frac{8}{25} \times \frac{5}{16} \times \frac{13}{26}$
- 4. Divide: $\frac{24}{9} \div \frac{13}{25}$
- 5. Find the arithmetic mean of first 5 prime numbers.
- 6. Write an equation for the given statement "One fourth of m is 3 more than 7".
- 7. Solve the equation: 2t + 73 = -10 + 7t
- &. An angle is 2/3 of its complement. Find the angle.
- 9. Two angles of a triangle are 72° and 48°. What is the measure of the third angle?
- 10. Is it possible to make a triangle with sides measuring 5.2cm, 4.7cm, 9cm.

SECTION - B

- 1. Find the value, using suitable property \$85128 x 99 (-85128)
- 2. By what number we should multiply $\frac{15}{29}$ so that the product is $\frac{3}{7}$.

- 3. Simplify: $\frac{8}{15} + \frac{31}{75} \frac{2}{5}$
- 4. If 8 is the mean of 4, 7, a, 8, 10, 12; Find the value of a.
- Raju's father age is 5 years more than three times Raju's age. Find Raju's age, if his father's age is 44 years old.
- Name two figures with no line of symmetry.
- 7. In the adjoining figure $\angle 1$ and $\angle 2$ are in the ratio 4:5. Find the value of $\angle 1$ and $\angle 2$.



8. The measure of three angles of a triangle are in the ratio 3:2:1. Find the measure of these angles. On the basis of angles, find the type of the triangle.

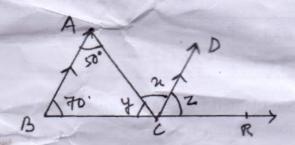
SECTION - C

- 1. In a class test (+3) marks are given for every correct answer and (-2) marks are given for every incorrect answer and no marks for not attempting any question.
 - (i) Radhika scored 20 marks. If she has got 12 correct answer how many question she attempted incorrectly?
 - (ii) Mohini scored -5 marks in this test, though she has got 7 correct answers. How many questions she attempted incorrectly?
- 2. Divide the Sum of $\frac{91}{12}$ and $\frac{11}{3}$ by their difference.
- 3. Following are the marks obtained by 15 students in Mathematics (out of 100) 72, 93, 52, 95, 56, 65, 69, 73, 42, 77, 86, 49, 80, 72, 55. Calculate the mean marks.
- 4. A dice is rolled. What is the probability of getting the following outcomes
 - (i) 2

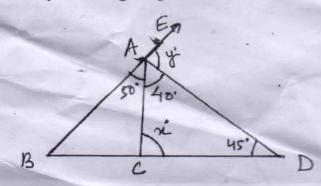
(ii) less than 5

- (iii) an odd number
- 5. The sum of three consecutive numbers is 78. Find the numbers.
- 6. Solve $7x 5\{x [7 6(x-3)]\} = 3x + 1$
- If p is point on the side BC of triangle ABC. Prove that AB + BC + AC > 2AP

8. In the given figure, AB || CD, Find the measure of x, y, z.



Find the value of x and y in the figure given below



- 10. State the number of lines of symmetry for the following figures:
 - (i) An equilateral triangle

(ii) An isosceles triangle

(iii) A scalene triangle

(iv) A square

(v) A rectangle

(vi) A rhombus

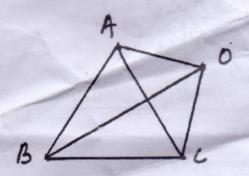
SECTION - D

- A cement company earns a profit of Rs. 8 per bag on white cement sold and a loss of Rs. 5 per bag of grey cement sold.
 - (a) The company sells 3000 bags of white cement and 5000 bags of grey cement in a month. What is the profit or loss?
 - (b) What is the number of white cement bags it must sell to have neither profit nor loss, if the number of grey bags sold is 6400 bags.
- 2. Simplify $\left(\frac{3}{11} \times \frac{5}{6}\right) \left(\frac{9}{12} \times \frac{4}{3}\right) + \left(\frac{5}{13} \times \frac{6}{15}\right)$

3. Draw bar graph to represent the following data:

Colour	Red	Orange	Yellow	Green	Blue	Pink
No. of boys	15	10	5	8	15	7

- People of Sundaragram planted trees in the village garden. Some of the trees were fruit trees. The number of non-fruit tress were two more than three times the number of fruit trees. What was the number of fruit planted if the number of fruit trees planted were 77?
- 5. If O is a point in the exterior of $\triangle ABC$, show that 2 (OA+OB+OC) > AB+BC+CA.



6. A tree broke from a point but did not separate. If the point from where is broke 7m above the ground and its top touches the ground at a distance of 24 m from its, find the total height of the tree before it broke.