**PRACTICE PAPER 3**

**CLASS VI**I

**SECTION A**

1. Find 20% of 120 km
2. Find the area of a rectangle whose sides are 2a and 3a.
3. Factorise 16m – 4m2
4. Solve for x : 5x – 2 = 18
5. Two circles are congruent if they have -----------
6. Find the altitude of a rhombus whose area is 320 m2 and side is 5m
7. Find the circumference of a circle whose radius is 7cm
8. Fold the following net to get a solid and name it

**SECTION B**

1. Find the area of an right isosceles triangle whose equal sides are 15cm.
2. Find 12.5% of 3.5% of Rs 256.
3. Solve for y : 7/y + 1 = 29
4. Triangle ABC is isosceles with AB = AC . Line segment AD bisects angle A and meets base BC at D.Find the third pair of corresponding parts which makes triangles ABD and ACD congruent by SAS congruence condition.Is it true to say that BD = CD ? Why?



1. Sketch a cuboid of size 3 x 3 x 2 on a squared paper.
2. Find the median of : 15,47,48,81,17,27,9,3,10,75

 **SECTION C**

1. In a certain hospital, the mean birth rate of a week was 35. If the mean birth rate from Monday to Thursday was 32 and that of Thursday to Sunday was 36 , find the birth on Thursday.
2. A wire is in the form of a circle of radius 42cm.It is bent into a square. Find the side of the square.
3. Triangle ABC is an isosceles triangle in which AB = AC . Also D is a point such that BD = CD. Prove that AD bisects angle A and angled.

 

1. An oblong garden measures 60m by 55m. From the centre of each side , a path 2m wide goes across to the centre of the opposite side. Find the area of the path.
2. How many vertices , edges and faces will a cuboid have ? What is the shape of its faces?
3. The length of a rectangle is 16cm less than twice its breadth. If the perimeter of the rectangle is 100cm, find its length and breadth.
4. In what time will a sum of money double itself at 15% per annum?
5. Factorise : ab2 – bc2 –ab +c2
6. Find the product of 0.2 xy ( 3x + 2y) and verify the result when x = 5 and y = - 1
7. Solve the following equation :

( x + 2) ( x + 3) + ( x – 3) ( x – 2) – 2x ( x + 1) = 0

**SECTION D**

1. Show that the bisector of the vertical angle of an isosceles triangle bisecs the base at right angles.
2. A garden is 120m long and 85 m wide. It has an inside path of width 3.5m all around it . The remaining part of the garden is covered with grass. Find thecost of covering the garden by grass at 50 paise per square metre.
3. The following data gives the maximum and minimum temperatures of the cities on a particular day. Plot a double graph from this data and answer the following questions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| City | Delhi | Banglore | Srinagar | Mumbai | Chennai |
| Maximum Temp. | 23 | 20 | 10 | 30 | 32 |
| Minimum Temp. | 20 | 19 | 4 | 28 | 27 |

1. Which city shows the minimum difference in days temperature?
2. Which are the hottest and the coldest cities?
3. The sum of circumferences of four small circles of equal radii is equal to the circumference of a bigger circle. Fin d the ratio of the area of the bigger circle to that of the smaller circle.
4. In the given figure

a)IS angle AOC = angle BOD?

b)Is triangles AOC and BOD congruent by ASA condition?

c) State the three facts you have used to answer (b)

d) Is angle ACO = angle BDO? Why?

30 A man travelled 2/5th of his journey by train , 1/3rd by taxi , 1/6th bybus and remaining 10 km by foot. Find the length of his journey.

31Two equal sides of a triangle are 5m less than twice the third side. If the perimeter of the triangle is 55m , find the lengths of the sides.

32 Simplify : ( a2 + b2) ( a2 + b2) – ( a2 – b2) ( a2 – b2)

33 Mr. Tandon purchased a computer for Rs. 32000 and a microwave oven for Rs. 6500. On computer he lost 5% and on oven he gained 15$ . Find his total gain or loss.

34 Mr. JAnes donates Rs. 2000 to a school and the interest on it is to be used for awarding 5 scholarships of equal value . If the value of each scholarship is Rs. 40, find the rate of interest.