Total No. of Questions: 12

Total No. of Pages:03

Class 9th
Term 2nd 2019
MATH

Series-B

Time: 2:30 Hrs.

Max. Marks: 40

Section (A)

Q.No.1. Do as directed;

(I) The point (-1000,1000) lies in;

   a) I Quadrant   b) II Quadrat

   c) III Quadrant   d) IV Quadrant

(II) Two congruent triangles have equal area and conversely.   (True/False)

(III) Which of the following is parallelogram;

   a) Rectangle   b) Rhombus

   c) Square   d) All of these

(IV) The longest chord of a circle is its .... (Radius/Diameter)

(V) Formula used to calculate the curved surface area of a cone is ....   (Fill in the blanks)

1x5= 5 Marks

Section (B)

Q.No.2. Find the median of the data;

3, 2, 5, 4, 1, 0, 2

Q.No.3. If three angles of a trapezium are 60°, 60° and 120°, find the fourth angle.

2 Marks

Q.No.4. Find the surface area of sphere whose radius is 7m.

2 Marks

Q.No.5. Find the perimeter of $\triangle ABC$ in which AB = BC = 21m and AC = 25m.

2 Marks

Section (C)
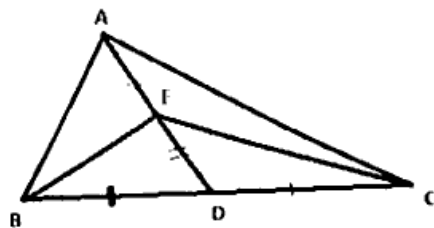
Q.No.6. E is the mid-point on median AD of $\triangle ABC$.
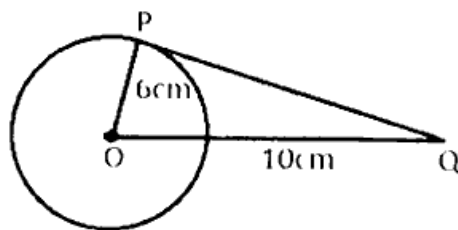(See given figure) Show that;

$$ar(AEB) = ar(AEC)$$

Q.No.7. Draw a rough sketch of;
   a) A triangle and a parallelogram on the same base between the same parallels.
   b) Two Parallelograms on the same base between the same parallels.

Q.No.8. PQ is tangent and PO the radius of a circle. (See given figure) If OQ = 10cm and PO = 6cm. Find the length of tangent PQ.

3 Marks

Q.No.9. Curved surface area of right circular cylinder is 4.4m². If the radius of its base is 0.7m, find its height.

Section (D)

Q.No.10. If two equal chords of a circle intersect within the circle, prove that the segments of one chord are equal to the corresponding segments of another chord.

Or

If non parallel sides of a trapezium are equal, prove that it is cyclic.

Q.No.11. Twenty-seven (27) solid iron spheres each of radius 1m are melted to form a single sphere. Find the radius of single sphere so obtained.
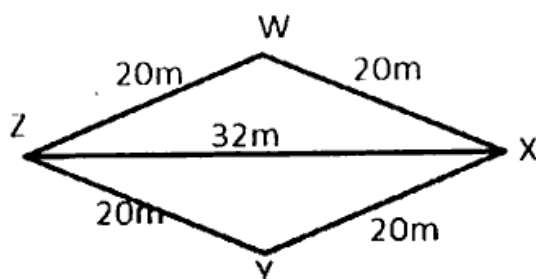
Or

A right $\triangle PQR$ with sides 5cm, 12cm and 13cm is revolved about the side 12cm. Find the volume of the solid so obtained.

Q.No.12. Sides of a triangle are in the ratio 3:4:5 and its perimeter is 12m. Find its area.

Or

Nazim has a piece of land whose outline is given below. Calculate the area of the land.

5 Marks