Question Paper Class 8

Mathematics (Term 3)

Time: 2 Hours **Max. Marks: 50**

I. Choose the correct answer. **(5 × 1 = 5)**

1. A three-dimensional shape composed of polygons is called _____.

a. circle b. polyhedron c. kite d. none of these

2. There are only _____ platonic solids.

a. 2 b. 3 c. 4 d. 5

3. The side of an equilateral triangle is 4 cm. Its area is _____.

a. $4\sqrt{3}$ sq. cm b. $5\sqrt{3}$ sq. cm c. 6 sq. cm d. None of these

4. What is the volume of a cuboid measuring 12 cm by 10 cm by 6 cm?

a. 620 cubic cm b. 720 cubic cm c. 830 cubic cm d. 720 square cm

5. In Cartesian plane, in the 1st quadrant, the signs of the coordinates are _____.

a. (+, +) b. (+, -) c. (-, -) d. (-, +)

II. Write the following statements as True or False. **(10 × 1 = 10)**

1. The x-coordinate is called as Abscissa and the y-coordinate is called as Ordinate.
2. A graph which is used to represent the data that changes continuously with time is called a line graph.
3. In a histogram, the bars are drawn with a constant gap in between.
4. If an event will surely occur or is certain to happen, then its probability is 0.
5. 1 mL = 1 cubic cm.
6. The lateral surface area of a cuboid, whose dimensions are l = 15 cm, b = 10 cm and h = 12 cm, is 500 sq. cm.
7. The area of a rhombus is half the product of its diagonals.
8. A rectangle is a parallelogram in which all the four angles are equal.
9. We need at least four elements of a quadrilateral to determine it uniquely.
10. The number of edges in a pyramid with a square base is 5.

III. Match the following. **(5 × 1 = 5)**

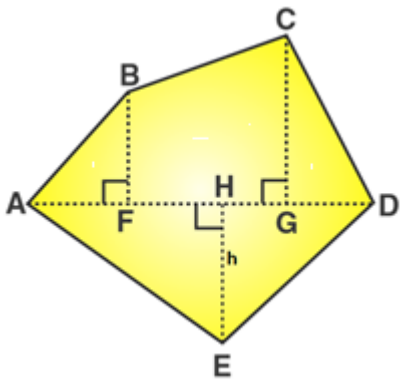
1. Area of a quadrilateral	(i) $4 l^2$ sq. units
2. Area of the trapezium	(ii) ½ × altitude × sum of the parallel side
3. Volume of a hollow cylinder	(iii) $2(lb + bh + lh)$ sq. units
4. Total surface area of a cuboid	(iv)) $\pi h(R^2 - r^2)$ cubic units
5. Lateral surface area of a cube	(v) ½ × d × $(h_1 + h_2)$

IV. Answer the following. **(5 × 2 = 10)**

1. Find the total surface area of a hollow cylinder whose external and internal radii are 5 cm and 2 cm, respectively and the height is 7 cm.
2. Two cubes each of side 6 cm are joined end to end. Find the volume of the resulting cuboid.
3. The radius and height of a cylinder are in the ratio 5 : 7 and its volume is 550 cubic cm. Find its radius.
4. Prepare the frequency distribution table for the given set of scores:
   39, 16, 30, 37, 53, 15, 16, 60, 58, 26, 28, 19, 20, 12, 14, 24, 59, 21, 57, 38, 25, 36, 24, 15, 25, 41, 52, 45, 60, 63, 18, 26, 43, 36, 18, 27, 59, 63, 46, 42, 48, 35, 64, 24.
   Take class intervals as (10 – 20), (20 – 30), etc.
5. What is the probability of getting a King in 52 deck of cards?

V. Answer the following. **(4 × 5 = 20)**

1. Construct a quadrilateral ABCD in which AB = 6 cm, BC = 4 cm, CD = 4 cm
   ∠B = 95˚ and ∠C = 90˚.
2. Find the area of the pentagon shown in figure, if AD = 10 cm, AG = 8 cm, AH = 6 cm, AF = 5 cm, BF = 5 cm, CG = 7 cm and EH = 3 cm.



3. The monthly expenditure of a family on various items is given below.

Item	Rent	Food	Clothing	Education	Saving
Expenditure (in ₹)	8000	10800	5600	3600	800

Represent the above data by a pie chart.

4. A bag contains 3 red balls and 5 black balls. A ball is drawn at random from the bag. What is the probability that the ball drawn is

   (i) red? (ii) not red?

ANSWER KEYS

I. Choose the correct answer

1. b 2. d 3. a 4. b 5. a

II. Write the following statements as True or False.

1. True 2. True 3. False 4. False 5. True

6. False 7. True 8. True 9. False 10. False

III. Match the following.

1. – v 2. – ii 3. - iv 4. – iii 5. - i

IV. Answer the following.

1. 440 sq. cm 2. 432 cubic cm 3. 5 cm 5. 1/13

V. Answer the following.

2. 52.5 sq. cm 4. (i) 3/8 (ii) 5/8