Sub: Maths Class: VIII (CBSE)

**Question Paper** 9: Mensuration

**Total Marks: 30 Time:** 1 Hour

		Section A (Each 1 Mark)					
	Se	elect the most app	ropr	iate answer from	the given option	ıs (MCQ	'S - Q.1 to Q
Q.1	:	$1 \text{ cm}^3 =$					
		a) 0.000001m <sup>3</sup>	b)	$0.01m^{3}$	c) $0.1 \text{m}^3$	d)	1000m³
Q.2	:	The total surface area of a cylinder of base radius r and height h is					
		a) $2\pi r(h+r)$	b)	$\pi r(h+r)$	c) 2πrh	d)	$2\pi r^2$
Q.3	:	The volume of a cube of edge a is					
		a) $a^2$	b)	$a^3$	c) a <sup>4</sup>	d)	$6a^2$
Q.4	:	$1m^3$			$Q_{0}$		
		a) 1 litre	b)	10 litre	c) 100 litre	d)	1000 litre
Q.5	:	If the height of a cuboid becomes zero, it will take the shape of a					
		a) Cube	b)	parallelogram	c) Circle	d)	rectangle
	Fi	ill in the blank. (Q	.6 to	Q.7)	)′		
Q.6	:	The total surface area of a cube, when volume is 1 cm <sup>3</sup> is					
Q.7	:	1 Litre =		cm <sup>3</sup> .			
	W	rite whether the	folloy	ving statements a	re True or False	. (Q.8 to	Q.9)
Q.8	:	The areas of any two faces of a cuboid are equal.					
Q.9	:	Volume of a cube is 216 cm <sup>3</sup> . Its surface area is 216 cm <sup>2</sup> .					
			<i>Y</i> ,	Section B (E	Cach 2 Marks )		
Q.10	:	Find the height of a cuboid whole volume is 275 cm <sup>3</sup> and base area is 25 cm <sup>2</sup> .					
		12		•	OR		
		Find the volume of the cylinder.					
C				()  ← 2m −	→ 250 m <sup>2</sup>		

Q.11: Find the side of a cube whose total surface area is 600 cm<sup>2</sup>.

## Section C (Each 3 Marks )

Q.12 : A cuboid is of dimensions  $60\text{cm} \times 54\text{ cm} \times 30\text{ cm}$  How many small cubes with side 6 cm can be placed in the given cuboid?

## OR

The diagonal of a quadrilateral shaped field is 24m and the perpendiculars dropped on it from the remaining opposite vertices are 8m and 13m. Find the area of the field.

- Q.13: In a building there are 24 cyindrical pillars. The radius of each pillar is 28 cm and the height is 4m. Find the total cost of painting the curved surface area of all pillars at the rate of Rs. 8 per m<sup>2</sup>.
- Q.14: Find the height of the cylinder whose volume is 1.54m<sup>3</sup> and diameter of the base is 140 cm.

## Section D (Each 4 Marks)

Q.15: The floor of a building consists of 3000 tiles which are rhombus shaped and each of its diagonals are 45cm and 30cm in length Find the total cost of polishing the floor, if the cost per m<sup>2</sup> is Rs. 4.

## OR

A milk tank is in the form of cylinder whose radius is 1.5m and length is 7m. Find the quantity of milk in litres that can be stored in the tank.

Q.16: Water is pouring into a cuboidal reservoir at the rate of 60 litres per minute. If the volume of reservoir is 108m<sup>3</sup>. Find the number of hours it will take to fill the reservoir.

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