

**BCM SCHOOL, BASANT AVENUE, DUGRI, LUDHIANA.**  
**ANSWER KEY OF FEBRUARY ASSIGNMENT**  
**CLASS- VIII (MATHEMATICS)**  
**TOPICS: MENSURATION**

**SECTION –A (MULTIPLE CHOICE QUESTIONS)**

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|----|--|
| 1. | c) 294 cm <sup>2</sup>   |
| 2. | c) 6400  |
| 3. | a) Both A and R are true and R is the correct explanation of A |

**SECTION – B( 2 MARKS QUESTIONS)**

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| 4. | Let the sides be 4x and 5x<br>Area of trapezium = $\frac{1}{2} \times \text{height} \times \text{sum of parallel sides}$<br>Therefore, sides are 20cm and 25 cm |
| 5. | Area of rhombus = $\frac{1}{2} \times d_1 \times d_2$<br>Therefore, other diagonal is 18 cm   |

**SECTION – C (3 MARKS QUESTIONS)**

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| 6. | Radius = 3.5m<br>Height = 16m<br>Volume of earth dug out = $\pi r^2 h = 616\text{m}^3$<br>Area of platform = $(25 \times 16)\text{m}^2 = 400\text{m}^2$<br>Height of the platform = $\frac{\text{Volume}}{\text{Area}} = 1.5\text{m}$ |
| 7. | Let the dimensions of the cuboid be 2x, 3x and 4x<br>TSA of cuboid = $2(lb + bh + hl) = 468$<br>$x = 3$<br>Hence, dimensions are 6m , 9m and 12m  |

**SECTION – D (5 MARKS QUESTIONS)**

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|----|---|
| 8. | Length of the longest pole = Length of the diagonal of the cuboidal room<br>$= \sqrt{l^2 + b^2 + h^2} = 15\text{m}$   |
| 9. | Let the edge of the third cube be l<br>Sum of the volume of three smaller cubes = Volume of metal cube<br>$(5)^3 + (4)^3 + (l)^3 = 2933$<br>$l = 14 \text{ cm}$ |