

# SIDDEEQ PUBLIC SCHOOL

## MODEL PAPER of MATHEMATICS for ADMISSION to Grade: 8 (Max. Marks:35)

### **Objective**

**Q1. Complete the following mathematical statements.** (1.0×4)

- (i) The square root of additive identity is \_\_\_\_\_.
- (ii) Base and exponent of expression  $(x - y)^3$  are \_\_\_\_\_ and \_\_\_\_\_ respectively.
- (iii) When we convert 36 km/ h into m/s, we get \_\_\_\_\_.
- (iv) If  $A = \{0, 1, 2, 3, \dots\}$ ,  $B = \text{set of Natural numbers}$  then difference of  $A$  &  $B$  is \_\_\_\_\_.

### **Computational Strategies**

**Q2. Verify the Distributive Property:**  $2\frac{2}{3} \times \left(\frac{1}{2} - 6\right) = \left(2\frac{2}{3} \times \frac{1}{2}\right) - \left(2\frac{2}{3} \times 6\right)$  (4.0)

**Q3. Find the product of  $(2x + 5y)$  and  $(2x - 5y)$  by using suitable identity.** (4.0)

**Q4. Find the solution of**  $\frac{5}{2} \left(\frac{3}{2} - 2x\right) + \frac{3}{2} \left(2x - \frac{5}{2}\right) = 0$  (4.0)

**Q5. Find the square root of 151. 29** (4.0)

### **Problem Solving Skills, Geometry & Shapes**

**Q6. Find the perimeter of a rectangular park whose length is three times of its width and the area is  $720.75\text{m}^2$ .** (5.0)

**Q7. 12 water pumps** can empty a water tank in **20 minutes**. But **2 pumps got out of order**. How long will the **remaining pumps** take to empty the tank. (5.0)

**Q8. Find the cost of carpeting the floor of circular shaped room having radius of  $21\text{m}$  at the rate of Rs  $25/\text{m}^2$ .** ( $\pi \approx \frac{22}{7}$ ) (5.0)