



**Note:** (1) Think and Answer (2) Marks will be awarded for right answers only

**Name:**

**Date:**

<b>Areas of improvement:</b>

<b>Maximum Marks</b>	
<b>Marks Obtained</b>	
<b>%</b>	

<b>Parent's Signature</b>	<b>Parent's Signature</b>



**Section – A**

**Q1.** Additive inverse of  $-2/-5$  is

- (a)  $2/5$
- (b)  $5/2$
- (c)  $2/-5$
- (d)  $5/-2$

**Q2.** Sum of a rational number and its additive inverse is

- (a) 1
- (b) 0
- (c) -1
- (d) None of these

**Q3.** Rational numbers are not closed under

- (a) addition
- (b) subtraction
- (c) multiplication
- (d) division

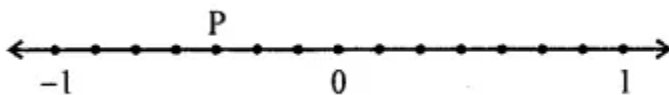
**Q4.** Multiplication of a non-zero rational number and its reciprocal is

- (a) 0
- (b) 1
- (c) -1
- (d) None of these

**Q5.** The sum of the rational number  $4/7$  and its reciprocal is

- (a)  $28/65$
- (b)  $65/28$
- (c)  $-28/65$
- (d)  $-65/28$

**Q6.** The rational number represented by the point P on the number line is



- (a)  $-5/7$
- (b)  $-3/7$
- (c)  $-5/8$
- (d)  $-4/8$



**Section – B**

**Q7.** If  $a = -11/27$ ,  $b = 4/9$  and  $c = -5/18$ , then verify that  $a + (b + c) = (a + b) + c$

**Q8.** If  $x = 4/9$ ,  $y = -7/12$  and  $z = -2/3$ , then verify that  $x - (y - z) \neq (x - y) - z$

**Q9.** If  $p = -8/27$ ,  $q = 3/4$  and  $r = -12/15$ , then verify that

(i)  $p \times (q \times r) = (p \times q) \times r$

(ii)  $p \times (q - r) = p \times q - p \times r$

**Q10.** If  $p = -3/2$ ,  $q = 4/5$  and  $r = -7/12$ , then verify that  $(p \div q) \div r \neq p \div (q \div r)$ .

**Section - C**

**Q11.** Write five rational numbers which are smaller than -4.

**Q12.** Find three rational numbers between -2 and -1.

**Q13.** If the product of two rational numbers is  $25/42$  and one of them  $-2\frac{6}{7}$ , find the other.

**Section – D (Any one)**

**Q14.** The population of the city is 6,63,432. If  $1/2$  of the population are adult males and  $1/3$  of the population are adult females, then find the number of children in the city.

**Q15.** Using the appropriate properties of operations of rational numbers, evaluate the following:

(i)  $\frac{2}{5} \times \frac{-3}{7} - \frac{1}{14} - \frac{3}{7} \times \frac{3}{5}$

(ii)  $\frac{8}{9} \times \frac{4}{5} + \frac{5}{6} - \frac{9}{5} \times \frac{8}{9}$

(iii)  $\frac{-3}{7} \times \frac{14}{15} \times \frac{7}{12} \times \left(\frac{-30}{35}\right)$