



BARODA HIGH SCHOOL, ONGC (Afternoon Shift)

Primary Section

UT- I Examination: 2025-26

Subject: - MATHS

Std - VIII

Date: 05/08/25

Marks: 25

Q.1(A) Choose the correct option:

(2)

- i) The reciprocal of a negative rational number is:
a) Positive b) Negative c) Zero d) Cannot be determined
- ii) Which of the following is a solution of the equation $2x + 3 = 11$?
a) 3 b) 4 c) 5 d) 2
- iii) A rational number is said to be in standard form if:
a) Its denominator is 1
b) It cannot be simplified
c) Its numerator and denominator have no common factors other than 1
d) Both a and c
- iv) Which of the following is not a rational number?
a) 0 b) 7 c) $-\frac{3}{4}$ d) $\frac{7}{0}$

(B) Fill in the blanks.

(3)

- i) _____ is called the additive identity for integers and whole numbers as well.
- ii) Rational numbers are not closed under _____ operation.
- iii) The sum of any rational number and _____ is always the same rational number.
- iv) A rational number which has no reciprocal is _____.
- v) $\frac{x}{2} - 1 = 5$, then $x =$ _____.
- vi) In the equation $2x - 7 = 3$, the constant term on the LHS is _____.

(C) State Whether TRUE or FALSE.

(3)

- i) Transposing a term changes its sign.
- ii) $-\frac{4}{11} \times \frac{4}{11} = (-1)$
- iii) The product of two rational numbers is always a rational number.
- iv) Addition is commutative for rational numbers.
- v) Solution of $x + 1 = 18$ is 17.

vi) $2xy + 5$ is an expression with one variable.

(D) Match the following.

(2)

Column I	Column II
I. $a \div 0$	a) Expression
II. $a(b + c) = ab + ac$	b) Equation
III. $2x - 3$	c) Distributive property
IV. $2x - 3 = 9$	d) Not defined

Q.2. (A) Solve:

(4)

i) Find: $\frac{-4}{5} \times \frac{3}{7} \times \frac{15}{16} \times \left(\frac{-14}{9}\right)$

ii) Find using distributivity: $\left\{\frac{7}{5} \times \left(\frac{-3}{5}\right)\right\} + \left\{\frac{7}{5} \times \frac{5}{12}\right\}$

(B) Solve the linear equation:

(6)

(i) $m - \frac{(m-1)}{2} = 1 - \frac{(m-2)}{3}$

(ii) $3(5z - 7) - 2(9z - 11) = 4(8z - 13) - 17$

Q.3. Do as directed:

i) Simplify the following (using appropriate properties of the rational number and mention the name of properties used):

(2)

$$\left(\frac{1}{2} \times \frac{13}{10}\right) + \left(\frac{1}{2} \times \frac{7}{10}\right)$$

ii) Solve the following linear equations.

(1)

$$\frac{x-5}{3} = \frac{x-3}{5}$$

(iii) Verify the associative property of addition for rational numbers using $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$.

(2)