

VIII - Mathematics Test No - 01 - Rational number - M.C.Q. Type.

Choose the Correct answer from the multiple answers.

Max. Marks = 50; Max. Time = 90 min

Instructions

1. In all, there are 25 questions
2. Each question carries 02 marks
3. There is no negative marking
4. Selecting more than one answer gives you zero mark in that question.

(Q1) To write a number in the form of a rational number $\frac{p}{q}$, the restriction on q is

- (i) $q=0$ (ii) $q \neq 0$ (iii) $q > 0$ (iv) $q < 0$

(Q2) The reciprocal of $-\frac{8}{17}$ is

- (i) $-\frac{17}{8}$ (ii) $+\frac{8}{17}$ (iii) $-\frac{17}{-8}$ (iv) $-\frac{8}{-17}$

(Q3) The additive inverse of $-\frac{a}{b}$ is

- (i) $\frac{b}{a}$ (ii) $\frac{a}{-b}$ (iii) $\frac{a}{b}$ (iv) $-\frac{b}{a}$

Cont-Pg-2

(Q4) If $\frac{1}{8}$ and $\frac{4}{7}$ are two rational numbers then $\frac{1}{8} \times \frac{4}{7}$ is also a rational number by which property?

- (i) closure (ii) commutative (iii) Associative
- (iv) D.L

(Q5) Between any two rational numbers, how many numbers you can find?

- (i) 10 (ii) 20 (iii) Some Finite numbers
- (iv) Unlimited numbers

(Q6) Which property is used in $\frac{3}{8} \times 1 = \frac{3}{8}$?

- (i) closure (ii) Commutative (iii) Property of one
- (iv) Associative

(Q7) The rational number which lies between $\frac{1}{2}$ and $\frac{1}{4}$ is

- (i) $\frac{3}{8}$ (ii) $\frac{5}{8}$ (iii) $\frac{7}{8}$ (iv) $\frac{9}{8}$

(Q8) The numbers $\frac{1}{2} + \left(\frac{1}{4} + \frac{1}{8} \right)$ is equivalent to

- (i) $\frac{6}{8}$ (ii) $\frac{5}{8}$ (iii) $\frac{4}{8}$ (iv) $\frac{1}{8}$

(Q9) The Simplified form of

$$\frac{1}{8} \times \frac{3}{2} \times \frac{4}{7} \times \frac{4}{3}$$

- (i) 0 (ii) 1 (iii) 2 (iv) $\frac{3}{7}$

(Q10) What should be Subtracted from $\frac{5}{8}$ to get $(-\frac{1}{24})$?

- (i) $\frac{2}{3}$ (ii) $\frac{3}{2}$ (iii) $\frac{5}{6}$ (iv) $\frac{1}{4}$

(Q11) Is Subtraction Commutative in the Set of different rational numbers?

- (i) Yes (ii) No (iii) Sometimes
(iv) none of these

(Q12) Is $\frac{2}{3} + (\frac{5}{6} + \frac{1}{3}) = (\frac{2}{3} + \frac{5}{6}) + \frac{1}{3}$ true by which property?

- (i) closure (ii) commutative (iii) associative
(iv) none of these

(Q13) Is division closed in the set of rational numbers.

- (i) yes (ii) no (iii) sometimes (iv) none of these

(Q14) The product of two numbers is 80. If one of them is $13\frac{1}{3}$, the other number is

- (i) 6 (ii) 7 (iii) 8 (iv) $\frac{4}{5}$

(Q15) $12\frac{1}{4}$ metre cloth cost Rs $212\frac{1}{3}$.
The cost of 1 metre cloth is

- (i) $17\frac{1}{3}$ (ii) $27\frac{1}{3}$ (iii) $17\frac{2}{3}$ (iv) $27\frac{2}{3}$

(Q16) The product of the additive inverse and the multiplicative inverse of -5 is

- (i) 1 (ii) 0 (iii) -1 (iv) -5

(Q17) $\frac{3}{-4} \times \frac{-16}{7}$ is

- (i) $\frac{-7}{12}$ (ii) $\frac{12}{7}$ (iii) $-\frac{12}{7}$ (iv) $\frac{7}{12}$

(Q18) Which property of multiplication is used here?

$$-\frac{2}{3} \times \left(\frac{5}{6} + \frac{-2}{3}\right) = \left(-\frac{2}{3}\right) \times \left(\frac{5}{6}\right) + \left(-\frac{2}{3}\right) \times \left(\frac{-2}{3}\right)$$

- (i) Closure (ii) Commutative (iii) Associative (iv) D.L

(Q19) If x and y are two rational numbers then $|x+y|$ is Pg-5

- (i) $|x+y| \leq |x| + |y|$ (ii) $|x+y| < |x| + |y|$
- (iii) $|x+y| \geq |x| + |y|$ (iv) $|x+y| = |x| + |y|$

(Q20) $- \left| \frac{5}{6} - \frac{2}{3} \right|$ is equal to

- (i) $\frac{1}{6}$ (ii) $-\frac{1}{6}$ (iii) $\frac{9}{6}$ (iv) $\frac{6}{9}$

(Q21) How many rational numbers are there whose absolute value is $\frac{5}{6}$

- (i) Infinite (ii) only 2 (iii) only 3 (iv) only one

(Q22) If $\frac{a}{b}$ and $\frac{c}{d}$ are two different rational numbers then is $\left(\frac{ad+bc}{bd} \right)$ always a rational number?

- (i) No (ii) Yes (iii) Sometime (iv) None of these

(Q23) If $x = -\frac{5}{12}$, $y = \frac{5}{12}$ then $|x+y|$ is

- (i) $\frac{10}{12}$ (ii) $\frac{12}{10}$ (iii) $-\frac{10}{12}$ (iv) $\frac{0}{12}$

(Q24) The product of $(-2\frac{3}{4})$ with $(-1\frac{1}{3})$ is

- (i) $-\frac{11}{3}$ (ii) $\frac{3}{11}$ (iii) $\frac{11}{3}$ (iv) None of these

(Q25) Is zero a rational number?

- (i) Yes (ii) No (iii) Sometime (iv) Never