

VIII - Mathematics Test No-02 - Rational Numbers - MCQ-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) If  $\frac{0}{15}$  is a rational number, can you say that its reciprocal is also a rational number?

- (i) yes (ii) No (iii) Sometime (iv) never.

(Q2) The multiplicative identity for rational numbers is

- (i) 0 (ii) -1 (iii) 1 (iv)  $\frac{1}{\text{rational no.}}$

Cont Pg-2

- (Q3) Rational numbers are not closed under  
 (i) Addition (ii) Subtraction (iii) Multiplication (iv) Division
- (Q4) Commutative property in rational numbers are valid under all the four operations (+, -, ×, ÷)  
 (i) Yes (ii) No (iii) Sometime (iv) none of these
- (Q5) The additive identity for rational numbers is  
 (i) 1 (ii) -1 (iii) 0 (iv) none of these
- (Q6) Between two rational numbers, how many rational numbers one can find.  
 (i) 5 (ii) 4 (iii) 3 (iv) Infinite
- (Q7) The additive inverse of  $(-\frac{5}{12})$  is  
 (i)  $\frac{12}{5}$  (ii)  $-\frac{12}{5}$  (iii)  $\frac{5}{12}$  (iv)  $-\frac{5}{12}$
- (Q8) The multiplicative inverse of  $(\frac{3}{4})$  is  
 (i)  $\frac{3}{4}$  (ii)  $-\frac{3}{4}$  (iii)  $-\frac{4}{3}$  (iv)  $\frac{4}{3}$
- (Q9) The reciprocal of 1 is  
 (i) 0 (ii) -1 (iii) 1 (iv) does not Exist.

(Q10) Distributive property for any three rational numbers  $a, b, c$  is

- (i)  $a+b+c = b+a+c$  (ii)  $a \cdot b \cdot c = b \cdot a \cdot c$
- (iii)  $a+(b+c) = (a+b)+c$  (iv)  $a \times (b+c) = a \times b + a \times c$

(Q11) Can you represent any rational number on the number line?

- (i) Yes (ii) not every (iii) only few
- (iv) none of these

(Q12) Find one rational between  $\frac{1}{2}$  and  $\frac{1}{4}$  using the idea of mean

- (i)  $\frac{3}{8}$  (ii)  $\frac{4}{8}$  (iii)  $\frac{5}{8}$  (iv)  $\frac{6}{8}$

(Q13) Find a number whose reciprocal is same as the number

- (i) 0 (ii) -1 (iii) 1 (iv) none of these

(Q14) Multiply  $\frac{6}{13}$  by the reciprocal of  $-\frac{7}{15}$

- (i)  $\frac{90}{91}$  (ii)  $\frac{91}{90}$  (iii)  $-\frac{90}{91}$  (iv)  $-\frac{91}{90}$

(Q15) If  $-\frac{6}{13} \times x = 1$ , the value of  $x$  is

- (i)  $\frac{13}{6}$  (ii)  $-\frac{13}{6}$  (iii)  $\frac{6}{13}$  (iv)  $-\frac{13}{6}$

(Q16) Is  $0.3$  the multiplicative inverse of  $3\frac{1}{3}$ ?

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

(Q17) If  $x, y$  are two rational numbers then  $|x \times y|$  is

- (i)  $< |x| \times |y|$  (ii)  $\leq |x| \times |y|$  (iii)  $= |x| \times |y|$
- (iv) None of these

(Q18) If  $a, b, c$  are any three rational numbers and  $a \neq 0$ , what can you say about  $(b+c) \div a = b \div a + c \div a$ ?

- (i) True (ii) False (iii) not always true
- (iv) None of these

(Q19) Which of the following statements is true?

- (i)  $\frac{7}{9} < \frac{9}{11} < \frac{11}{13}$  (ii)  $\frac{9}{11} < \frac{11}{13} < \frac{7}{9}$
- (iii)  $\frac{9}{11} < \frac{7}{9} < \frac{11}{13}$  (iv)  $\frac{7}{9} > \frac{9}{11} < \frac{11}{13}$

(Q20) After arranging  $\frac{1}{2}, \frac{7}{-8}$  and  $-\frac{4}{5}$  in descending order, the middle number is

- (i)  $\frac{1}{2}$  (ii)  $-\frac{4}{5}$  (iii)  $\frac{7}{-8}$  (iv)  $\frac{-3}{8}$

(Q21) The difference between the greatest and the least of  $\frac{-5}{9}, \frac{2}{9}, \frac{1}{9}$  Pg-5

- (i)  $-\frac{1}{9}$  (ii)  $\frac{9}{7}$  (iii)  $\frac{7}{9}$  (iv)  $\frac{3}{9}$

(Q22) Divide the sum of  $-\frac{5}{6}$  and  $-\frac{7}{12}$  by their product

- (i)  $\frac{35}{69}$  (ii)  $\frac{35}{-72}$  (iii)  $-\frac{102}{35}$  (iv)  $\frac{102}{35}$

(Q23) The perimeter of a rectangle if its length is  $5\frac{2}{3}$  m and width is  $1\frac{1}{3}$  m.

- (i) 14 (ii)  $14\frac{1}{3}$  (iii) 9 (iv)  $\frac{21}{5}$

(Q24) Subtract the sum of  $-1\frac{1}{3}$  and  $2\frac{5}{6}$  from  $-5\frac{2}{6}$

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

(Q25) The simplified form of

$$\frac{5}{16} \times \frac{8}{25} \times -\frac{4}{3} \times \frac{15}{2} \text{ is}$$

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