

**VIII Mathematics Chapter- Rational Number**  
**CBSE TEST PAPER-01**

1. Write:

- (i) The rational number that does not have a reciprocal.
- (ii) The rational numbers that is equal to their reciprocals.
- (iii) The rational number that is equal to its negative.
- (iv) The additive inverse of a negative number

2. Fill in the blanks.

- (i) Zero has \_\_\_\_\_ reciprocal.
- (ii) The numbers \_\_\_\_\_ and \_\_\_\_\_ are their own reciprocals
- (iii) The reciprocal of  $-5$  is \_\_\_\_\_.
- (v) The product of two rational numbers is always a \_\_\_\_\_.
- (vi) The reciprocal of a positive rational number is \_\_\_\_\_.
- (vii) The number which can be written in the form of  $p/q$ , where  $q \neq 0$ , is called \_\_\_\_\_ number.  
(A) Rational (B) Irrational (C) Real (D) Natural
- (viii) All rational numbers have multiplicative inverse except \_\_\_\_\_.  
(A)  $-1$  (B)  $1$  (C)  $0$  (D) None
- (ix) The sum of any two rational numbers is a \_\_\_\_\_ number.  
(A) Even (B) Real (C) Rational (D) Natural
- (x).  $1$  A rational number  $p/q$  is said to be in the simplest form if the HCF of  $p$  and  $q$  is  
(a)  $2$  (b)  $1$  (c)  $0$  (d)  $3$
- (xi) Between any two distinct rational numbers there exist  
(a) Finite rational numbers (b) Infinite rational numbers  
(a) No rational number (d) none of the above
- (xii) A rational number  $a/b$  is greater than  $c/d$  if  
(a)  $ad > bc$  (b)  $ad < bc$  (c)  $ad = bc$  (d)  $ad \neq bc$
- (xiii)  $.4$  Is zero a rational number  
(a) Yes (b) No (c) Can't say
- (xiv) Rational numbers are not closed under  
(a) Addition (b) Multiplication (c) Division (d) Subtraction
- (xv) If the additive inverse of " $b$ " is " $a$ " then:  
(A)  $ab=1$  (B)  $a=b$  (C)  $a+b=0$  (D)  $a-b=0$

3. Solve:

- 1. If you subtract  $1/2$  from a number and multiply the result by  $1/2$ , you get  $1/8$ . What is the number?
- 2. Three consecutive integers are such that when they are taken in increasing order and multiplied by  $2$ ,  $3$ , and  $4$  respectively, they add up to  $74$ . Find these numbers.
- 4. Represent the following rational numbers on the number line  
(a)  $-1/4$  (b)  $-11/5$  (c)  $-38/5$  (d)  $-7/10$  (e)  $-5/3$
- 5. Find two rational numbers between (i)  $-2$  and  $2$ . (ii)  $-1$  and  $0$ .
- 6. Insert six rational numbers between (i)  $-1/3$  and  $-2/3$  (ii)  $1/4$  and  $1/2$