

**GENIUS HIGH SCHOOL :: BHUVANAGIRI**

**FORMATIVE ASSESSMENT - I**

**Class : VIII**

**Time: 1Hr**

**Subject : MATHEMATICS**

**Max Marks : 40**

**SECTION - I      10×1=10m**

**I. Multiple choice questions**

- 1) Which of the following statements is false ?
  - (a) Natural numbers are closed under addition
  - (b) Whole numbers are closed under addition
  - (c) Integers are closed under addition
  - (d) Rational numbers are not closed under addition.
- 2) Which of the following statements is false ?
  - (a) Natural numbers are closed under subtraction
  - (b) Whole numbers are not closed under subtraction
  - (c) Integers are closed under subtraction
  - (d) Rational numbers are closed under subtraction.
- 3) of the following statements is true ?
  - (a) Natural numbers are closed under division
  - (b) Whole numbers are not closed under division
  - (c) Integers are closed under division
  - (d) Rational numbers are closed under division.
- 4) 0 is not
  - (a) a natural number
  - (b) a whole number
  - (c) an integer
  - (d) a rational number
- 5) The multiplicative inverse of 12 is
  - (a) 1
  - (b) -1
  - (c) 2
  - (d) 0
- 6) The rational number that does not have a reciprocal is
  - (a) 0
  - (b) 1
  - (c) -1
  - (d) 12
- 7) The standard form of a linear equation in one variable x is
  - (a)  $ax + b = 0$
  - (b)  $ax^2 + bx + c = 0$
  - (c)  $ax^3 + bx^2 + cx + d = 0$
  - (d)  $ax^4 + bx^3 + cx^2 + dx + e = 0$
- 8) The statement 'on adding 10 in a number, the number becomes 20' in the form of an equation is
  - (a)  $x - 10 = 20$
  - (b)  $x + 10 = 20$
  - (c)  $10x = 20$
  - (d)  $x10 = 20$ .
- 9) The root of the equation  $z + 4 = -8$  is
  - (a) 3

(b) -32

(c) 12

(d) 4.

10) The root of the equation  $5x - 8 = 7$  is

(a) 1

(b) 2

(c) 3

(d) -3.

## SECTION - II $6 \times 2 = 12m$

### Short Answer Type Questions:

11)  $10 + 6x = 22$

12) What are the multiplicative and additive identities of rational numbers?

13) Write the additive inverse of  $19/-6$  and  $-2/3$

14) Write the multiplicative inverse of  $-13/19$  and  $-7$

15) Mention a rational number which has no reciprocal.

Or

Mention any 4 rational numbers which are less than 5.

16) Find 5 rational number between  $1/4$  and  $1/2$  ?

Or

Add multiplicative inverse of  $1/8$  with  $1/2$

## SECTION -III $6 \times 3 = 18m$

### Long answer type questions

17) Represent  $-1/2$ ,  $-3/4$ , and  $-5/6$  on the number line.

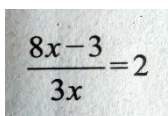
Or

Mention commutative property for any two rational numbers

18) Solve  $3(2x - 3) = 4(2x + 4)$

19) Find the three consecutive integers whose sum is 63 ( take three consecutive integers as  $x$ ,  $x+1$ ,  $x+2$  ) ?

Or


$$\frac{8x-3}{3x} = 2$$

Solve

20) Fifteen years from now Hurrera age will be 4 times her present age, find her present age

Or

Give 2 rational numbers whose multiplicative inverse is same as they are.

21) Find 10 rational numbers between  $\frac{3}{5}$  and  $\frac{4}{3}$  ?

22) The perimeter of a rectangular swimming pool is 154 meters. Its length is 11 m find its breadth

Or

A number is 12 more than the other. Find the numbers if their sum is 48.(take a number  $x$  and other as  $x+12$ )