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 6×2=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 -⅔

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 ¼ and ½ ?

Or

Add multiplicative inverse of 1/8 with 1/2

SECTION -III 6×3=18m

Long answer type questions

17) Represent − / , − / , and − / 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 3/5 and 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)