**Aarambh Classes**

**Class X**

**MATHS TEST**

**FIRST THREE CHAPTERS**

**TIME : 2 HOURS M.Marks : 40**

**1 mark questions :**

1. The ratio of HCF to LCM of the least composite number and the least prime number is :

(a) 1:2 (b) 2:1 © 1:1 (d) 1:3

1. The total number of factors of aprime no .is :

(a)1 (b) 0 (C) 2 (d) 3

3. If HCF (39,91) =13 , then LCM (39,91) is :

(a) 91 (b) 273 © 39 (d) 3549

4. If ‘n ‘ is any natural number ,then (12) cannot end with the digit

(a) 2 (b) 4 © 8 (d) 0

5. If one of the zeroes of a quadratic polynomial (k-1)x +kx+1 is –3 ,then the value of k is :

(a) (b) © (d)

6. The degree of polynomial having zeroes –3 and 4 only is :

(a) 2 (b)1 © more than 3 (d) 3

7. If one of the zeroes of the quadratic polynomial x +3x+k is 2 ,then the value of k is

(a) 10 (b)-10 © -7 (d) -2

8. The pair of linear equations 2x=5y+6 and 15Y=6X-18 represents two lines which are :

(a) intersecting (b) parallel © coincident (d) either intersecting or parallel

9. The pair of equations y=2 and y=-3 has

(a) one solution (b) two solutions © infinetely many solutions (d) no solution

10. The pair of equations x =5 and y=5 has

(a) no solution (b) unique solution © many solutions (d) only solution (0,0)

**2** marks questions :

11. The sum of the numerator and the denominator of a fraction is 18 .If the denominator is increased by 2 ,the fraction reduces to .Find the fraction.

12. If one zero of the polynomial p(x) =6x+37x -(k-2) is reciprocal of the other ,,then find the value of k .

13 . Two numbers are in the ratio 2 : 3 and their LCM is 180 .What is the HCF of these numbers ?

**3 marks questions :**

14. Prove that is an irrational number .

15. Find the zeros of the polynomial 6x-3-7x and verify the relationship between the zeroes and the coefficients of the polynomial .

16. The present age of father is three years more than three times the age of his son .Three years hence the father’s age will be 10 years more than twice the age of the son .Determine their present ages .

**5 marks questions :**

**17.**  The sum of the digits of two digit number is 9. Also 9 times the number is twice the number obtained by reversing the order of digits .Find the numbers .

**Case study question :**