



# KENDRIYA VIDYALAYA KHAMMAM

## FARMATIVE ASSESSMENT-I (2015-16)

Time : 90mins

CLASS- IX MATHS

Marks : 40

### I. Answer the following MCQ's

4X1=4

1)  $(64)^{\frac{1}{2}}$  -----

- a) 8                      b) 2                      c) 4                      d) 6

2) The degree of the polynomial  $5x^3+4x^2+7x =$  -----

- a)3                      b)5                      c)4                      d)6

3) How many numbers of lines can pass through two distinct points.

- a)2                      b)1                      c)3                      d)infinite

4) Euclid stated that all right angles are equal to each other in the form of-----

- a) an axiom              b)a definition              c)a postulate              d)a proof

### II. Answer the following questions

4x2=8

5) Rationalise the denominator of  $\frac{1}{2+\sqrt{3}}$

6) Find the value of k, if x-1 is a factor of  $4x^3+3x^2-4x+k$

7) If AC=BD then prove that AB=CD



8) Prove that every line segment has one and only one mid point.

**III. Answer the following questions**

**4x3=12**

9) Find three different irrational numbers between the rational numbers  $\frac{5}{7}$  and  $\frac{9}{11}$

10) Classify the following numbers as rational (or) irrational.

a)  $\sqrt{23}$

b) 0.3796

c) 7.478478.....

11) Factorise  $x^3+13x^2+32x+20$

12) Expand  $(-2x+3y+2z)^2$ , using suitable identities.

**IV. Answer the following questions**

**4x4=16**

13) Locate  $\sqrt{2}$  on the number line.

14) Express 0.001 in the form of  $\frac{p}{q}$ , where p and q are integers and  $q \neq 0$ .

15) Verify  $x^3+y^3 = (x+y) (x^2-xy+y^2)$

16) Factorise  $4x^2+9y^2+16z^2+12xy-24yz-16xz$

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