SUBJECT –MATHEMATICS,,CLASS-IX
CHAPTER-2 (POLYNOMIALS)
WORKSHEET(STANDARD)

Choose the correct option: (3 X 1=3)

1.$\sqrt{3}$ is a polynomial of degree

(a) 3 (b)0 (c)1 (d)1/2

2.ZERO Of the zero polynomial is

(a)0 (b)1 (c) any real number (d)not defined

3.One of the factors of $(25x^2-1) + (1+5x)^2$ is

(a)5+x (b)5-x (c)5x-1 (d)10x

Fill in the blanks(2 X 1=2)

4.If a+b +c=0, then $a^3+b^3+c^3$ is equal to ----------

5.If $x^{51}+51$ is divided by x+1, the remainder is ----------

Answer the following (1)

6.If $x^2 +kx +6 = (x+2)(x+3)$ for all x, then find the value of k

Short answer Type Questions –I(2 X 2 =4)

7.Factorise $1 – 64a^3 -12a +48a^2$

8.The polynomial $P(x) =x^4 – 2x^3 +3x^2 – ax +3a -7$ when divided by x+1 leaves the remainder 19. Find the value of a. Also find the remainder when p(x) is divided by x+2.

Short answer type question-II(2 X 3 =6)

9.If a, b,c are all non-zero and a+b+c=0, Prove that

$\frac{a^2}{bc} + \frac{b^2}{ca} + \frac{c^2}{ab} = 3$

10. Without finding the cubes factorise

$(x - 2y)^3+(2y-3z)^3+(3z-x)^3$

Long answer type Question☹(1 X4=4)

11.If a+ b+c =5 and ab+bc+ca =10, then Prove that $a^3+b^3+c^3 – 3abc = - 25$.