



# ST. LAWRENCE HIGH SCHOOL



## TOPIC – Polynomials

Subject : Mathematics

Class-9

First term

F. M. 15

WORKSHEET NO. - 17

Solutions

Date: 20.03.2021

**Q.1) Choose the correct option:**

**(1x15=15)**

- i) Which of the followings is a polynomial in one variable?  
c)  $\sqrt{2}x^2 - 3\sqrt{x} + 6$
- ii) Which of the followings is a polynomial?  
a)  $x - 1$
- iii) Which of the followings is a linear polynomial?  
b)  $x + 1$
- iv) Which of the followings is a second degree polynomial?  
d)  $x^2 + 5x + 6$
- v) The degree of the polynomial  $\sqrt{3}$  is  
d) 0
- vi) If the polynomial  $x^3 + 6x^2 + 4x + k$  is divisible by  $(x + 2)$ , then the value of k is  
c) -8
- vii) In the polynomial  $f(x)$  if  $f(-\frac{1}{2}) = 0$ , then the factor of  $f(x)$  will be  
b)  $2x + 1$
- viii)  $(x - 1)$  is factor of the polynomial  $f(x)$  but it is not the factor of  $g(x)$ . So  $(x - 1)$  will be a factor of  
a)  $f(x)g(x)$
- ix)  $(x+1)$  is a factor of the polynomial  $x^n + 1$  when  
a) n is a positive odd integer
- x) If  $n^2 - 1$  is a factor of the polynomial  $an^4 + bn^3 + cn^2 + dn + e$ , then  
a)  $a + c + e = b + d$
- xi) Which of the following expressions is linear polynomial?  
b)  $x + 4$
- xii) Which of the following is a quadratic polynomial?  
c)  $x^2 + 3x + 5$
- xiii) The polynomial  $x^2 - x - 12$  is  
b) divisible by  $x+3$
- xiv)  $x+3$  is a factor of  $x^3 + 6x^2 + 12x + k$ , if k is equal to  
c) 9
- xv) If 30 is the remainder when  $x^3 + 3x^2 + 3x + a$  is divided by  $x - 2$ , then the value of a will be  
d) 4

-Chaitali Roy