ST. LAWRENCE HIGH SCHOOL

TOPIC –Factorisation

Subject : Mathematics   **Class-9**   **First Term**F. M. 15

WORKSHEET NO. - 20   **Solutions**   **Date: 29.03.2021**

Q.1)   <u>**Choose the correct option**</u>:   (1x15=15)

i) If $a^2 - b^2$ = 63 and a, b are negative integers (a<b) then the values of a and b are
   a) a=-8, b=-1

ii) If x + y + z = 1 then the factorization of x + yz is
   a) (1-y)(1-z)

iii) If $a^2 - b^2$ = 13 x 9 (a, b are positive integers) then the values of a and b are
   a) a=11, b=2

iv)If $(x-1)^3 + (x-2)^3 + (x-3)^3 - 3(x-1)(x-2)(x-3)$ = 0 then the values of x are
   b)2

v)If $\frac{a}{b} + \frac{b}{a} + 1$ = 0 then the value of $a^3 - b^3$ is
   c) 0

vi) If $x^2 - px - 6$ = (x+1)(x-a) is an identity then the values of a and p are respectively
c)a=6, p=5

vii)The value of $25^3 - 75^3 + 50^3 + 3 \times 25 \times 75 \times 50$ is
   d)0

viii)If $a^2 - b^2$ = 192 and a and b are negative integers (a<b) then the values of a and b are respectively
   c)a=-14, b=-2

ix) If the two factors of $m^3 - m$ are m and m-1 then the third factor is
   c)m + 1

x)If m and n are positive integers and m-n is an even number then $m^2 - n^2$ will be divisible by
a)4

xi)If $x + \frac{1}{x}$ = 1 then the value of $x^2 + 1/x^2$ is
   b)   0

xii)If a=7, b=4, c=3 then the value of $a^3 - b^3 - c^3 - 3abc$ is
   b)0

xiii)The value of 101 x 99 is _____
   d)9999

xiv) If a – b = 1 and $a^3 - b^3$ = 61 then the value of ab is _____
a)20

xv)If $\frac{x}{y} + \frac{y}{x}$ = -1 then the value of $x^3 - y^3$ is
   c)   0

-Chaitali Roy