



ST. LAWRENCE HIGH SCHOOL



TOPIC –Laws of Indices

Subject : Mathematics

Class-9

First Term

F. M. 15

WORKSHEET NO. - 2

Solutions

Date: 18.01.2021

Q.1) Choose the correct option:

(1x15=15)

- i) Which one of the following is the value of $(27)^{-2/3}$
c) $1/9$
- ii) Which one of the following is the value of $(-32)^{-3/5}$
d) $-1/8$
- iii) If $x = 5$, $y = 3$, then the value of $(x+y)^{x/y}$ will be
d) 32
- iv) Which among the numbers $3^{1/3}$, $2^{1/2}$, $8^{1/4}$, $4^{1/6}$ is least
d) $4^{1/6}$
- v) The simplest value of $9^{1/3} \times (27)^{1/9} \times (4)^{-1/4} \times 2^{1/2}$ is
c) 3
- vi) The simplest value of $3^3 \times (243)^{-2/3} \times 9^{-1/3}$ is
a) $1/3$
- vii) The simplest value of $(27/8)^{2/3} - (1/4)^{-2} + 5^0$ is
b) $-51/4$
- viii) If $2^{(5x-1)} = 4 \times 2^{(3x+1)}$, then the value of x is
c) 2
- ix) The value of $(0.001)^{-1/3}$ is
c) 10
- x) The value of $(0.027)^{-2/3}$ is
a) $100/9$
- xi) The value of $7^0 \times (25)^{-3/2} - 5^{-3}$ is
d) 0
- xii) If $3^{3x} = 1/9$, then the value of x is
a) $-2/3$
- xiii) If $(729)^x = 9^{-6}$, then the value of x is
b) -2
- xiv) The value of $(32)^{-4/5}$ is
c) $1/16$
- xv) If $3^x \cdot 9^y = 81$, then $x + 2y$ is
a) 4

-Chaitali Roy