OPTIMUM
INTERNATIONAL SCHOOL

CLASS – VIII

Maths **Date:-17/04/2020**

CHAPTER 2 - EXPONENTS & POWERS

➔ **Watch the online videos "Exponents and Powers -Lecture 1" from Optimum Online E-Learning Platform and try to comprehend the concepts of Exponents & powers. After that try to solve the questions given in your assignment.**

1. **Find the multiplicative inverse of followings: i.** 3^{-2}

   ii. 7^{-8}

   Iii. 10^{-80} **Iv.** $\left(\frac{2}{15}\right)^{-10}$ **V.** $\left(\frac{-5}{10}\right)^{-5}$

2. **Simplify and write in exponential form:**

   i. $(-3)^{-2} \times (-3)^{-8} \times (-3)^{6}$

   Ii. $(a)^{-12} \times (a)^{8} \times (a)^{-5}$

3. **Find the values of following:**

   i. $\left(\frac{1}{2}\right)^{0} + \left(\frac{1}{3}\right)^{-2} + \left(\frac{1}{5}\right)^{-2}$

   Ii. $\left[\left(\frac{1}{2}\right)^{-2} + \left(\frac{1}{3}\right)^{-3}\right] \div \left(\frac{1}{5}\right)^{-2}$

   Iii. $(9^{\frac{3}{2}} - 4^{\frac{3}{2}}) \times \left(\frac{-3}{17}\right)^{2} \times \frac{34^{4}}{9^{2}}$

4. **Find value of X, if:**

   $\left(\frac{2}{3}\right)^{-5} \times \left(\frac{2}{3}\right)^{12} = \left(\frac{2}{3}\right)^{3x-2}$

5. **Write the following in standard form: i.**

   0.0000389

   Ii. 19280000

   Iii. $\frac{0.000462}{10^{7}}$

6. **Express the following numbers in ususal form:**

I. 2.08 $\times 10^{-5}$

Ii. 381624 $\times 10^{-6}$

Iii. 9 $\times 10^{-7}$

7. **By what number should** $\left(\frac{-3}{}\right)^{-1}_{2}$ **be divided so tha the quotient may be equal to 1/6.**

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