**JESUS AND MARY SCHOOL AND COLLEGE**

**CLASS-8 ( MATHS )**

**CHAPTER NAME – EXPONENTS ( POWERS )**

**WORKSHEET -1**

**Q.1- Choose the correct options:-**

 i) What is the base of the exponent $6^{9}$?

 a) 6 b) 2 c) 9 d) None of these

 ii) Find the value of $(9^{3})^{0}$.

 a) 0 b) 729 c) 1 d) None of these

 iii) Find the value of $(5^{2})^{2}$.

 a) 125 b) 625 c) 25 d) 0

 iv) $1^{3}+1^{-3}=?$ What is the solution ?

 a) 2 b) 3 c) -3 d) None of these

**Q.2-Simplify the following-**

 i) $2^{3}×3^{3}$ ii) $a^{-\frac{1}{3}}÷a^{\frac{2}{3}}$ iii) $\left[2^{3}÷2^{5}\right]^{3}$

**Q.3- Simplify :** $6^{-1}+6^{-2}÷6^{-1}-6^{0}×6^{-1}$

**Q.4- Find the value of** $5^{3}×5^{7}÷(5^{4})^{2}$

**Q.5- Evaluate -**

 i) $5^{-4}$ ii) $(-7)^{-2}$ iii) $(\frac{2}{7})^{3}$ iv) $(\sqrt{3 })^{0}$

**Q.6- Simplify :** $ a^{2}×a^{3}×a^{-5}$**.**

**Q.7- Find the value of** $\frac{2^{-5}×2^{9}}{2^{-2}}÷\frac{3^{-2}×3^{2}}{3^{-4}}$**.**

**Q.8- Evaluate :** $(3^{2})^{3}+\left(\frac{2}{3}\right)^{0}+3^{5}×\left(\frac{1}{3}\right)^{4}.$

**Q.9- Find the value of** $a^{a}+b^{b}+a^{b}+b^{a} $**if** $a=2,b=-3$

**Q.10- Simplify :** $\frac{(-2)^{3}×(-2)^{7}}{3×4^{6}}$

**Q.11- Evaluate :** $\frac{a^{-3}b^{-4}}{a^{-2}b^{-3}}$ **.**

**Note**- **Please do this assignment in your old copies. It will be checked when the school re-opens.**

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