INDIAN SCHOOL DARSAIT
DEPARTMENT OF MATHEMATICS
WORKSHEET # 10

Subject : MATHEMATICS Topic : EXPONENTS AND POWERS Date of Worksheet : 13/01/2019

Resource Person: Mrs. Indu.P

Name of the Student _____ Class &Division: _____ Roll Number : ____

	SECTION A **BASIC SKILLS**	
1.	Find 2 x 5 – 10 x 4	
2.	Find 5 x 5 x 5 x 5 x 5	
3.	Find 12 x 1000 + 34 x 100	
4.	Find -4 (9 – 15) x 2 (-3 + 8)	
5.	Find -3.16 x 4.52 x 1000	
Sl.No.	**SECTION B** **CHAPTER BASED QUESTIONS**	Marks
1.	Simplify $(a^{-1} + b^{-1})^{-1}$	1
2.	Find the value of the expression $(8^0 – 3^0) \times (8^0 + 3^0)$	1
3.	Write in power notation : $\frac{-2}{7} \times \frac{-2}{7} \times \frac{-2}{7}$	1
4.	Evaluate : i) $\{(\frac{-2}{3})^3\}^2$ ii) $(\frac{2}{5})^3 \div (\frac{2}{5})^4$	2
5.	Write the following numbers in standard form. i)23450000000000000 ii)0.0000766	2
6.	Write the following numbers in usual form. i)3.56×10^{-3} ii)1233.56×10^8	2
7.	If $6^{2x+1} \div 36 = 216$, find the value of x.	3
8.	Find the value of x ,if i)$(\frac{7}{3})^{-4} \times (\frac{7}{3})^{-5} = (\frac{7}{3})^{3x}$	3

9.	Simplify (a) $\frac{(-2)^3\times 5^3\times (-3)^4}{125\times 3^4}$ (b) $(5^6\times p^7)\div(25\times p^3)$ (c) $[(3^3)^2\times 3^4]\div 3^8$ (d) $\frac{4^0}{5^0\times 6^0}$ (e) $(\frac{-1}{3})^2\times(\frac{3}{-2})^3\times(\frac{2}{5})^3$	2 2 1 1 2
10.	Find the product of 5 and the reciprocal of $[\frac{2}{5}]^{-1}$	2
	SECTION C **HOT QUESTIONS**	
1.	Find the value of $(7^{-1}-8^{-1})^{-1}-(3^{-1}-4^{-1})^{-1}$	3
2.	Find the multiplicative inverse of $7^{-1}\div 90^{-1}$	2
3.	Simplify: $(5/8)^{-7}\times(8/5)^{-5}$.	2
4.	Express 4^{-3} as a power with base 2.	2
5.	There are two numbers such that sum of the numbers is 35 and their difference is 7. Find the sum of their cubes.	3