INDIAN SCHOOL DARSAIT
DEPARTMENT OF MATHEMATICS
WORKSHEET # 10

Subject : MATHEMATICS	Topic : FACTORISATION	Date of Worksheet : 05/12/2018
Resource Person: Mrs. Indu.P		
Name of the Student _____	Class &Division: _____	Roll Number : ____

	SECTION A **BASIC SKILLS**	
1.	Find 2.3 – 1.345	
2.	Find 3.45 x 2000	
3.	Find -3 + 9 – 5 + 1	
4.	Find -4 (9 – 12) x 2 (-3 + 5)	
5.	Find -3.6 x 4.5 x -10 x 3.2	
Sl.No.	**SECTION B** **CHAPTER BASED QUESTIONS**	Marks
1.	Factorise the following: (i) $20\ a^3 – 25a^2b$ (ii) $10p^2qr + 12p^2q^2r - 16p^2qr^3$	2
2.	Factorise the following algebraic expressions using regrouping: (i) $5xy-y^2 + 10xz – 2yz$ (ii) $pa^2 + qb^2 + pb^2 + qa^2$	2
3.	Factorise using identities: (i) $x^2 + 16x + 64$ (ii) $1 – 6x + 9x^2$ (iii) $25a^2 - 40a + 16$	2
4.	Factorise using identities: (i) $100- 49a^2$ (ii) $x^3 – 64x$ (iii) $36x^2y^2 - 25$	3
5.	Factorise using identities: (i) $x^2 - 8x - 33$ (ii) $x^2 + 25x - 54$ (iii) $p^2 - 11p - 102$ (iv) $x^2 + 9x + 20$	3

6.	Divide the following algebraic expressions: (i) $35x^6y^4$ by $7x^2y^2$ (ii) 7x -35 by 7	2
7.	Factorize $(5z - 7)^2 + 140z$.	3
8.	Find factors of polynomial $(9p^2 + 12pq + 4q^2 - 4r^2)$.	3
9.	Divide $7x^6+x^3+2x+5$ with $b(x)=x^2$.	3
10.	Divide $2x^2-5x+6$ with $b(x) = x-3$.	2
11.	Divide $75a^3b^2 – 108ab^4$ with $5a – 6b$	3
12.	Simplify: $12(y^2 + 7y + 10) \div 6(y + 5)$	3
	SECTION C **HOT QUESTIONS**	
1.	Factorise $x^8 - 1$	3
2.	Factorise i) $64 – (a + 1)^2$ ii) $36l^2 – (m+n)^2$	3
3.	Factorise i)$(x + y)^2 – (a – b)^2$ ii) $9(a – b)^2 – 100(x – y)^2$	2
4.	Factorise $(x – 2y)^2 + 4x – 8y$	3
5.	Divide $10(x^3y^2x^2 + x^2y^3z^2 + x^2y^2z^3)$ by $5x^2y^2z^2$.	3
6.	Factorise: $54x^2 + 42x^3 – 30x^4$	3