Curriculum Plan: B. Sc. (Hons) Mathematics (Semester VI)- ADVANCED GROUP THEORY. (2025-26)-EVEN SEM

DR. ABHISHEK KR. SINGH Assistant Professor Department of Mathematics Kalindi College University of Delhi Delhi- 110008 Mobile: +91-8375834510 E- mail: abhishek@kalindi.du.ac.in		**Marks Distribution**	**Theory** -90
			Internal Assessment-30
		Classes Assigned	**Lectures: 3 per week**
	References	**1. JOSEPH A. GALLIAN (CONTEMPORARY ABSTRACT ALGEBRA) 4TH ED.** **2. DUMMIT AND FOOTE (ABSTRACT ALGEBRA) 8TH ED.**	
	Week	**Topics**	
	1st week	GROUP ACTIONS AND PERMUTATION REPRESENTATION. Continued.	
	2nd week	GROUP ACTIONS AND PERMUTATION REPRENTATION.	
	3rd week	STABILIZERS AND KERNELS OF GROUP ACTIONS. Continued.	
	4th week	STABILIZERS AND KERNELS OF GROUP ACTIONS.	
	5th week	GROUP ACTING ON THEMSELVES BY LEFT MULTIPLICATIONS AND CONSEQUENCES. Continued.	
	6th week	GROUP ACTING ON THEMSELVES BY LEFT MULTIPLICATIONS AND CONSEQUENCES.	
	7th week	CONJUGACY IN Sn.	
	8th week	SYLOW THEOREMS	
	9th week	FINITE SIMPLE GROUPS	
	10th week.	NONSIMPLICITY TESTS	
	11th week	SOLVABLE GROUPS	
	12th week	COMPOSITION SERIES	
	13th week	NILPOTENT GROUPS	
	14th week	JORDAN-HOLDER THEOREM	
	15th week	REVISION.	