Curriculum Plan: B.A.(Prog.) Mathematics (Major) (Semester I)- Elements of Discrete Mathematics
2024-25 Odd Sem

Dr. Rajni Kanwar Assistant Professor Department of Mathematics Kalindi College University of Delhi Delhi- 110008 Mobile: 7607401426 E- mail: rajnikanwar@kalindi.du.ac.in		**Marks Distribution**	**Theory** - 90
			Internal Assessment- 30 **Tutorial - 40**
		Classes Assigned	**Lectures: 1 per week**
	References	1. Goodaire, Edgar G. & Parmenter, Michael M. (2011). Discrete Mathematics with Graph Theory (3rd ed.). Pearson Education (Singapore) Pvt. Ltd. Indian Reprint. 2.Hunter, David J. (2017). Essentials of Discrete Mathematics (3rd ed.). Jones & Bartlett Learning, LLC 3. Lidl, Rudolf & Pilz, Günter (1998). Applied Abstract Algebra (2nd ed.). Springer. Indian Reprint 2014.	
	Week	Topics	
	1st week	Definition, Examples and properties of posets	
	2nd week	Questions based on properties of posets	
	3rd week	Maps between posets	
	4th week	Algebraic lattice	
	5th week	Practice of questions based on Algebraic lattice	
	6th week	Class test	
	7th week	Lattice as a poset and Duality principle	
	8th week	Sublattice and Hasse diagrams	
	9th week	Products and homomorphisms of lattices	
	10th week	Practice of questions based on Products and homomorphisms of lattices	
	11th week	Class Test	
	12th week	Distributive lattice	
	13th week	Complemented lattice	
	14th week	Practice of questions based on Distributive lattice and Complemented lattice	
	15th week	Class Test	