Name of the Faculty: Ms. Kirti	
Discipline: Computer Science & Engineering	
Semester:3rd Sem	
Subject: Discrete Structures(CSE-201N)	
Work Load (Lecture/Practical) per week (in hours): Lectures- 03	

Week	Theory	
	Lecture Day	**Topic (including assignment/test)**
1st	1st	Fundamentals - Sets and subsets
	2nd	Venn Diagrams, Operations on sets
	3rd	Laws of Set Theory
2nd	4th	Power Sets and Products
	5th	Partition of sets
	6th	The Principle of Inclusion- Exclusion
3rd	7th	Propositions and Logical operations
	8th	Truth tables, Equivalence
	9th	Implications, Laws of Logic
4th	10th	Predicates and quantifiers
	11th	Mathematical Induction
	12th	Product sets and partitions
5th	13th	Relations and diagraphs
	14th	Properties of relations, equivalence and partially ordered relations
	15th	Computer representation of relations and diagraphs
6th	16th	Manipulation of relations
	17th	Transitive closure and Warshall's algorithm
	18th	Transitive closure and Warshall's algorithm
7th	19th	Posets and Hasse Diagrams
	20th	Lattice and its implementation
	21st	Revision Unit 01
8th	22nd	Revision Unit 02
	23rd	Definitions and types of functions
	24th	Injective, subjective and bijective Function
9th	25th	Composition, identity and inverse
	26th	Review of Permutation and combination
	27th	Mathematical Induction
10th	28th	Mathematical Induction
	29th	Pigeon hole principle
	30th	Pigeon hole principle
11th	31st	Principle of inclusion and exclusion
	32nd	Generating function-Recurrence relations
	33rd	Algebraic structures with one binary operation
12th	34th	Semi groups, monoids and groups
	35th	Product and quotient of algebraic structures
	36th	Isomorphism
13th	37th	homomorphism, automorphism
	38th	Cyclic groups, Normal sub group
	39th	Codes and group codes
	40th	Ring homomorphism and Isomorphism

14th	41st	Ring homomorphism and Isomorphism
	42nd	Revision
15th	43rd	Revision
	44th	Revision
	45th	Revision