Programme: Master of Computer Applications

Semester I

PGCA1917

Discrete Structures & Optimization

Course Outcomes (COs)

CO#	At the end of the course, the student will be able to:
CO1	Apply the operations of sets and use Venn diagrams to solve applied problems; solve
	problems using the principle of inclusion-exclusion
CO2	Apply rules of inference, proof by contradiction, proof by cases, and write proofs
	using symbolic logic and Boolean Algebra
CO3	Solve counting problems by applying elementary counting techniques using the
	product and sum rules, permutations, combinations, the pigeon-hole principle.
CO4	Determine if a given graph is simple or a multigraph, directed or undirected, cyclic
	or acyclic, and determine the connectivity of a graph.

(Source: IKGPTU Syllabus for Master of Computer Applications (Affiliated Colleges), 2021. https://ptu.ac.in/wp-content/uploads/2022/05/MCA-2021-Upto-4th-Sem.pdf)