

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI**COURSE PLAN (June - November 2026)**

Department : Mathematics
Name of the Faculty : Dr. V. Jude Annie Cynthia
Course Title : Discrete Mathematics
Course Code : 23MT/ME/DM33
Shift : I

COURSE OUTCOMES (COs)

COs	Description						CL
CO1	acquire the knowledge of logical techniques and identify their applications						K1
CO2	recognize and apply the concepts of logic, lattices, Boolean algebra and Automata in related fields						K2
CO3	demonstrate the characterization of propositional calculus, lattices, Boolean functions and automata						K3
CO4	interpret the sets under study to apply in data structures and theory of computer languages						K4
CO5	assess the emerging fields to utilize the intrinsic concepts of discrete mathematics						K5
Week	Unit No.	Content	Cognitive Level	Teaching Hours	COs	Teaching Learning Methodology	Assessment Methods

Jun 15 – 22, 2026 (Day Order 1- 6)	1	Logic and Propositional Calculus 1.1 Logical Equivalence 1.2 Algebra of Propositions	K1-K5	4	CO1-5	Lecture, Discussions	Questioning & Slip Test
Jun 23 – July 1, 2026 (Day Order 1- 6)	1	Logic and Propositional Calculus 1.3 Arguments 1.4 Logical Implication	K1-K5	4	CO1-5	Problem Solving	Questioning
July 2 – July 8, 2026 (Day Order 1- 6)	1	Logic and Propositional Calculus 1.5 Propositional Functions, Quantifiers 1.6 Negation of Quantified Statements	K1-K5	4	CO1-5	Lecture, Discussions and Problem Solving	Questioning
July 9 – 16, 2026 (Day Order 1- 6)	1 & 2	Logic and Propositional Calculus 1.7 Normal Forms Lattices 2.1 Lattices	K1-K5	4	CO1-5	Discussions	III Component 1 Problem Solving Test (15 marks) Portions – Part of Unit 1 (KL - 1 & 3 L)
July 17 – 24, 2026 (Day Order 1- 6)	2	Lattices 2.2 Properties of lattices 2.3 Lattices as Algebraic	K1-K5	1	CO1-5		Slip Test

		System					
July 25 – 28, 2026 (Day Order 1- 3)	2	Lattices 2.4 Bounded, Complemented and Distributive lattices	K1-K5	1	CO1-5	Discussions	Questioning
July 29 – Aug 3, 2026	C.A. Test - I (Portions – part of Unit 1 & 2)						
Aug 4 - 6, 2026 (Day Order 4 - 6)	2	Lattices 2.4 Bounded, Complemented and Distributive lattices	K1-K5	1	CO1-5	Discussions	Questioning
Aug 7 – 14, 2026 (Day Order 1- 6)	3	Boolean Algebra 3.1 Basic properties of Boolean algebra 3.2 Representation Theorem	K1-K5	4	CO1-5	Interactive Teaching & Problem Solving	Slip Test
Aug 17 - 24, 2026 (Day Order 1- 6)	3	Boolean Algebra 3.3 Boolean Expressions 3.4 Boolean function	K1-K5	4	CO1-5	Teaching & Presentations	Questioning
Aug 25 – Sep 2, 2026 (Day Order 1- 6)	3 & 4	Boolean Algebra 3.4 Boolean function Finite State Automata 4.1 Finite state machines	K1-K5	4	CO1-5	Teaching & Problem Solving	Questioning
Sep 3 – 11, 2026 (Day Order 1- 6)	4	Finite State Automata 4.2 Finite state automata	K1-K5	4	CO1-5	Teaching & Presentations	III Component 2: Test (25

							Marks) Portions – Part of Unit 2 & 3 (KL - 2 & 4)
Sep 15-17, 2026 (Day Order 1 - 3)	4	Finite State Automata 4.4 Equivalence of DFSA and NDFSA	K1-K5	4	CO1-5	Interactive Teaching & Problem Solving	Questioning
Sep 18 –23, 2026	C.A. Test – II (Portions – Part of Units 3 & 4)						
Sep 24 - 28, 2026 (Day 4 – 6)	5	Languages and Grammars 5.1 Languages and Regular expressions	K1-K5	1	CO1-5	Interactive Teaching & Problem Solving	Questioning
Sep 29 – Oct 7, 2026 (Day Order 1 - 6)	5	Languages and Grammars 5.2 Languages determined by FSA 5.3 Grammars	K1-K5	5	CO1-5	Presentations	Slip Test
Oct 8 - 14, 2026 (Day Order 1 - 6)	5	Languages and Grammars 5.4 Derivation trees for context free grammar	K1-K5	5	CO1-5	Group Discussions	Component 3 – Test (10 Marks) Portions – Part of Unit 5 (K L - 5)

Oct 15 - 21, 2026 (Day Order 1- 4)	REVISION
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