THEORY OF COMPUTATION:

UNIT - I:

Finite Automation and Regular Expression: Finite State systems, Basic Definitions, Non -deterministic finite Automata, Finite Automata with moves, Regular Expressions, Two way finite automata, Finite automata with output, Application on Finite Automata.

UNIT - II:

Properties of Regular Sets: The pumping lemma for Regular Sets, Close properties of Regular sets, Decision Algorithms for Regular Sets. Context Free Grammars, Context Free Grammar, Derivation Tree,

UNIT - III:

Simplification of context Free Grammars, Chomsky Normal form, Greibach normal form, The existence of inherently ambiguous context free languages. Properties of Context free languages: The pumping lemma for CFL's, Closure properties of CFL's,

UNIT - IV :

Push Down Automata: Informal description, Definitions, Push - Down Automata & Context free languages.