Introduction and review of electrical machines; Principles of electromagnetic energy conversion: General expression of stored magnetic energy, co-energy and force/torque, single and doubly excited system; Generalized theory of rotating electrical machine and Kron’s primitive machine.

Introduction to reference frame theory, Application of reference frame theory to three phase symmetrical induction machines, modeling, steady state and transient analysis of induction machines, Unbalanced operation and fault analysis in three phase induction motors.


TEXT BOOKS/ REFERENCES: