## SIM

Topics for the second series test

## Module 4

Performance of three phase Induction motors using Circle diagram, Numerical Problems. Cogging and Crawling in cage motors, Double cage Induction motor-Torque-Slip Characteristics.

Starting of Induction motors – Types of Starters – DOL starter, Autotransformer Starter, Star-Delta starter, Rotor Resistance Starter-Numerical Problems.

Braking of Induction motors – Plugging, Dynamic braking, Regenerative braking, Speed control – Stator Voltage control, V/f control, Rotor Resistance Control.

## Module 5

Induction generator – Principle of operation, Grid Connected and Self Excited Operation of Induction Generators, Torque-Slip Characteristics of an Induction machine.

Single phase Induction motors-Double field revolving theory, Equivalent Circuit, Torque-Slip Characteristics, Types of Single Phase Induction motor, Applications.