

AMEL25 MACHINE DRIVES

UNIT-1 CHARACTERISTICS OF THE ELECTRIC MOTORS

- 1.1 Introduction, Characteristics Of Dc Motors,
- 1.2 Characteristic Of Three-Phase Induction Motor,
- 1.3 Variation Of Applied Voltage,
- 1.4 Pole Change Motors,
- 1.5 Slip Power Recovery Schemes,
- 1.6 Characteristics Of Synchronous Motors

UNIT-2 DYNAMICS OF ELECTRIC DRIVES

- 2.1 Introduction,
- 2.2 Classification Of Electric Drives,
- 2.3 Basic Elements Of An Electric Drive,
- 2.4 Dynamic Conditions Of A Drive System,
- 2.5 Stability Considerations Of Electrical Drives

UNIT-3 CONVERTERS FOR FEEDING ELECTRIC MOTORS

- 3.1 A General Survey of Converters For Feeding Electric Motors,
- 3.2 Phase Controlled Line Commutated Converters

UNIT-4 CONTROL OF ELECTRIC MOTOR

- 4.1 Induction motor drives,
- 4.2 Synchronous motor drives,
- 4.3 DC drives.

UNIT-5 CONTROL TECHNIQUES

- 5.1 Introduction,
- 5.2 Block diagram representation of drive systems,
- 5.3 Signal flow graph representation of the systems,
- 5.4 Transfer functions,
- 5.5 Transient response of closed loop drive systems,
- 5.6 Frequency response approach

Reference Books:

1. Electric power and electric Traction, Publisher Katsons, Writer J B Gupta
2. Electrical Technology, Publisher Katsons, Writer J B Gupta