About the Book

This book provides an up-to-date information on a number of important topics in control systems engineering.

The book includes

- Major historical landmarks in the development of the area of control systems engineering.
- Algebraic solution through laplace transform of linear differential equations which describe the operation of control systems.
- Information concerning the basis or inherent operating characteristics of a system.
- Mathematical modeling of electromechanical system typical transducers and control systems.
- Stability analysis.
- Application of the root-locus method to the design of control systems.
- Frequency response analysis with all varieties of graphical plots including relative stability.
- State-space methods.
- Compensation techniques.

This book will be useful for students of electrical / electronics / chemical / instrumentation disciplines and those appearing for AMIE, GATE, Civil services and Engineering services. A large number of solved and unsolved problems, review questions, MCQs are the prime feature of the book.

Salient Features

- Introduce P-I-D controllers in time-response analysis of control systems including steady-state error and static error constants.
- Emphasis on control system components including, sensors, amplidyne, stepper motor including magnetic amplifiers.
- Emphasis the frequency–domain design methods using Root Locus and Nyquist / Bode / Nicholas Plots.
- Designed stability of control system is a new direction which is not found in any other similar books.
- State variable representation of dynamic system are presented with linear algebra concepts.
- Design and compensation techniques dealt largely on Root Locus lag and Bode Plot lag compensation techniques.

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