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""4.1 Representation of Lines ""; ""4.2 Short Transmission Line ""; ""4.3 Medium Length Lines ""; ""4.4 Long Transmission Lines ""; ""4.5 ABCD Constants ""; ""4.6 Ferranti-Effect""; ""Chapter 5. High Voltage d.c Transmission""; ""5.1 Rectification ""; ""5.2 The 3-Phase Bridge Rectifier or Graetz Circuit ""; ""5.3 Inversion "" ""5.4 Kinds of d.c. Links """"5.5 Parallel and Series Connection of Thyristors""; ""5.6 Power Flow in HVDC Transmission System ""; ""5.7 Constant Ignition Angle  $I^2$  Control ""; ""5.8 Constant Extinction Angle  $I^2$  Control ""; ""5.9 Constant Current Control""; ""5.10 Actual Control Characteristics""; ""5.11 Frequency Control""; ""5.12 Reactive VAR Requirements of HVDC Converters ""; ""5.13 Parallel Operation of d.c Link with an a.c Network""; ""5.14 Ground Return""; ""5.15 Circuit Breaking ""; ""5.16 Advantages of d.c Transmission""; ""5.17 Disadvantages ""; ""5.18 Cables "" ""5.19 Economic Distances for d.c Transmission""""Chapter 6. Corona ""; ""6.1 Critical Disruptive Voltage""; ""6.2 Corona Loss ""; ""6.3 Line Design Based on Corona""; ""6.4 Radio Interference""; ""6.5 Inductive Interference between Power and Communication Lines ""; ""Chapter 7. Mechanical Design of Transmission Lines""; ""7.1 The Catenary Curve ""; ""7.2 Sag Tension Calculations""; ""7.3 Supports at Different Levels""; ""7.4 Stringing Chart""; ""7.5 Sag Template""; ""7.6 Equivalent Span""; ""7.7 Stringing of Conductors""; ""7.8 Vibration and Vibration Dampers""

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### Sommario/riassunto

Offers an exposition of the various dimensions of electrical power systems, both at basic and advanced levels, explained and illustrated through solved examples. This book includes solved examples, practice problems and multiple choice questions. It is suitable for undergraduate electrical engineering students and practicing engineers.

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