

Unit I

Chapter 1 : MOSFET DC Circuit Analysis 1-1 to 1-40

Syllabus : Enhancement MOSFET : Construction, Characteristics, DC load line, Parameters, Non-ideal characteristics : Finite output resistance, Body effect, Sub-threshold conduction, Breakdown effects, Temperature effects, Effect of W/L ratio.

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Unit III

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Unit IV

Chapter 6 : Operational Amplifier

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Syllabus : Block diagram, Differential amplifier analysis for dual input balanced output mode - AC analysis (using r parameters) and DC analysis, Level shifter, Op amp parameters, Current mirror, Op amp characteristics (AC and DC), Voltage series and voltage shunt feedback amplifiers, Effect on R_i , R_o , gain and bandwidth.

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Unit V

Chapter 7 : OP-AMP Applications 7-1 to 7-40

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Unit VI

Chapter 9 : Converters using OPAMP 9-1 to 9-32

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Unit VI

Chapter 10 : Phase Locked Loop 10-1 to 10-22

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