

**Chapter 1 : Differential, Multistage and Operational Amplifiers 1-1 to 1-41**

**Syllabus :** Differential amplifier; Power amplifier; Direct coupled multi-stage amplifier; Internal structure of an operational amplifier, Ideal op-amp, Non idealities in op-amp (Output offset voltage, Input bias current, Input offset current, Slew rate, Gain bandwidth product).

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**Chapter 7 : Shift Registers 7-1 to 7-20**

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Serial to parallel converter, Parallel to serial converter, Ring  
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**Chapter 8 : Counters 8-1 to 8-40**

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**Chapter 9 : D/A and A/D Converters 9-1 to 9-32**

**Syllabus** : Digital to analog converters : Weighed resistor/converter, R/2R ladder D/A converter, specifications of D/A converters, Examples of D/A converter ICs, Sample and hold circuit, Analog to digital converters : Quantization and encoding, Parallel comparator A/D converter, Successive approximation A/D converter, Counting A/D converter, Dual slope A/D converter, A/D converter using voltage to frequency and voltage to time conversion, Specifications of A/D converters, Examples of A/D converters ICs.

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