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Unit – II

Chapter 3 : Rectifiers, Filters and Voltage Regulators

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Syllabus : Rectifiers Half wave, Full wave and Bridge rectifiers, Working principle, Circuit diagram, Performance parameters PIV, Ripple factor, Efficiency, Need of filters, Circuit diagram and working of L, C and π filters. Zener diode as voltage regulator, Working principle and block diagram of a regulated power supply.

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Unit – III

Chapter 4 : Bipolar Junction Transistor 4-1 to 4-44

Syllabus : Unipolar and Bipolar devices, Symbol, Construction and working principle of NPN transistor, Transistor as switch and amplifier, CE, CB and CC configurations, Regions – Cut-off, Saturation and Active region, Transistor parameters -Alpha, Beta, Input and output resistances and relation between alpha and beta, Transistor biasing - DC load line, Q-point and Fixed bias and voltage divider biasing, RC coupled amplifier.

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Chapter 6 : Sensors and Transducers 6-1 to 6-28

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