COURSE – 4 Semiconductor Devices, Analog and Digital Electronics Credits - 4
Paper code PHY504

BLOCK – I SEMICONDUCTOR DIIODES, TRANSISTORS AND AMPLIFIERS

Unit –1 : Semiconductor Diodes
Unit –2 : Transistors
Unit –3 : Power Supplies
Unit –4 : Feedback Amplifiers
Unit –5 : RC coupled amplifier and its frequency response
Unit –6 : Oscillators (Using Transistors)
Unit –7 : Multivibrators (Using Transistors)

BLOCK – II OPERATIONAL AMPLIFIERS

Unit –8 : Operational Amplifier and its characteristics parameters
Unit –9 : Operational Amplifier – Configurations
Unit –10 : Operational Amplifier – Frequency Response
Unit –11 : Operational Amplifier – Linear Applications
Unit –12 : Operational Amplifier – Non-Linear Applications
Unit –13 : Operational Amplifier – Wave form generators

BLOCK – III DIGITAL ELECTRONICS

Unit –14 : Introduction to Digital Electronics and Logic Gates
Unit –15 : Applications of EX-OR gate
Unit –16 : De-Morgan's Theorems Fundamental Products, Karmaugh map
Unit –17 : Flip-flops
Unit –18 : Shift Registers
Unit –19 : Counters
Unit –20 : Multiplexer and Demultiplexer

BLOCK – IV CONVERTERS

Unit –21 : Digital –to – Analog Converters
Unit – 22 : Analog – to- Digital Converters