

2.13 30304 ELECTRICAL TECHNOLOGY

UNIT 1

Electric current and ohm's law electron drift velocity, mobility, resistance, unite of resistance, law of resistance and resistivity, conductance and conductivity, current divide rule and voltage divide rule, short and open circuits

UNIT 2

Work power and energy-effect of electric current-joule's law of electric heating, calculation of kilo watt power

UNIT 3

Dc network theorem electric circuit and network theorem, the venin theorem, Norton theorem, maximum power transformation theorem and superposition theorem, delta star transformation, mesh analysis, node Analysis, independent and dependent sources

UNIT 4

AC fundamentals-generation of alternating voltages and currents, time period, frequency, different equation of emf equation, phase difference, root mean square value, ac through pure ohmic resistance, capacitance and inductance

UNIT 5

Introduction to electrical energy generation-commercial or conventional energy sources, sources for generation of electricity, cost of generation, conventional energy sources, photo voltaic cells and solar cells and fuel cells

Reference Books:

1. Electrical Technology by C.R.Dargan
2. Electrical Technology by Mukesh Kumar Saini
3. Electrical Technology by J.B.Gupta

