

Course : BSc(H) Electronics Ist semester
Subject: Basic Circuit Theory and Network Analysis

Month	Unit	Topics covered
12.08.2016-20.08.2016	I	Basic Circuit Concepts: Voltage and Current Sources, Resistors, Construction and coding
22.08.2016-27.08.2016	I	Inductors ,self and mutual inductance, Faraday's and lenz's law, Energy stored in inductor and Capacitors, principle, basic terms, energy stored in capacitor, types of capacitor, construction and applications
29.08.2016-03.09.2016	II	Circuit Analysis KVL, KCL, Star delta conversion
05.09.2016-10.09.2016	II	Node, Mesh Analysis
10.09.2016		Test 1: Syllabus Unit 1 & 2
12.09.2016-17.09.2016	II	DC Transient Analysis RC circuits, charging and discharging phase, RL circuits and RLC circuits
19.09.2016-24.09.2016	III	AC Transient Analysis Sinusoidal voltage and current, Definition of instantaneous, peak to peak, root mean square and average value. Voltage and current relationship in resistor inductor and capacitor
26.09.2016-01.10.2016	III	Power in AC circuits Instantaneous , average, reactive power and power factor, Sinusoidal circuit analysis for RL, RC and RLC circuits Resonance in series and parallel RLC circuit and its frequency response
01.10.2016		Test 2: Syllabus Unit 2 & 3
03.10.2016-08.10.2016	IV	Passive Filters: Low and high pass, band pass and band stop
10.10.2016-15.10.2016	IV	Principle of duality, Network Theorems: Superposition theorem, Thevenin's and Norton's theorem
17.10.2016-22.10.2016	IV	Reciprocity, Millman's , Maximum power transfer theorems. AC circuit analysis using network theorem
22.10.2016		Test 3: Syllabus Unit 3 & 4
24.10.2016-29.10.2016	IV	Two port Networks: Z parameter, Admittance parameters and Transmission parameters
31.10.2016-05.11.2016		Numericals
07.11.2016-12.11.2016		Doubt classes