

	ZEAL EDUCATION SOCIETY'S ZEAL COLLEGE OF ENGINEERING AND RESEARCH NARHE PUNE -41 INDIA	

E-Content Development

Subject: Basic electrical engineering

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Playlist:

Sr. No.	Topic	Link
1.	Numerical problems solving using theorems, series parallel n/w reduction techniques, efficiency calculation of transformer	https://youtu.be/K3DkRL4t1Aw
2.	Numerical problems solving using Kirchoff's laws, Superposition theorem, Star Delta Transformation	https://youtu.be/A8madQpN-8Q
3.	Layout of power system, earthing, wiring types and accessories	https://youtu.be/LO52EOscWHE
4.	Three phase Delta connected circuit: Phase and line voltages, phase and line currents, balanced load, phasor diagram	https://youtu.be/v9QTDD2Az4g
5.	Three phase Star connected circuit :Phase and line voltages, phase and line currents, balanced load, phasor diagram	https://youtu.be/oes_1I9oY2U
6.	AC Parallel circuits: Admittance, conductance, susceptance, current triangle, admittance triangle	https://youtu.be/Wn8Itmom5n8
7.	R-L-C Series circuit, Inductive dominant, capacitive dominant, Net reactance, Series Resonance	https://youtu.be/UWUoXGk_Ikc
8.	RC Series Circuit: Power triangle, R-C Series circuit, Voltage triangle, Impedance triangle, Leading P.F.	https://youtu.be/ZSuC4gFrFQA
9.	R-L Series circuit, voltage triangle, impedance triangle, lagging power factor	https://youtu.be/Gxn49dE9N4s
10.	Phasors addition, subtraction, multiplication and division	https://youtu.be/j2aCDj_TV80
11.	Purely resistive, Purely inductive and Purely capacitive circuits	https://youtu.be/AGauk3zZV_8
12.	AC Fundamentals: Faraday's law of electromagnetic induction, instantaneous value, average value, RMS value	https://youtu.be/xaaK8Sliss4
13.	Transformer: Efficiency, Condition for maximum efficiency, Regulation of transformer, Direct loading test	https://youtu.be/9Gg6TdtwZhC
14.	Losses in transformer: Core losses and winding losses, Equivalent resistance and	https://youtu.be/jwCE466qeMY

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	leakage reactance referred to primary and secondary resp.	
15	Equivalent circuit of a transformer, Phasor diagram of transformer on load : Resistive, inductive and capacitive	https://youtu.be/Od-QiIzXdSc
16	Basics of single phase transformer, EMF Equation, Working principle of transformer on load and on no load, phasor diagram on no load	https://youtu.be/bB4jhc8kshQ