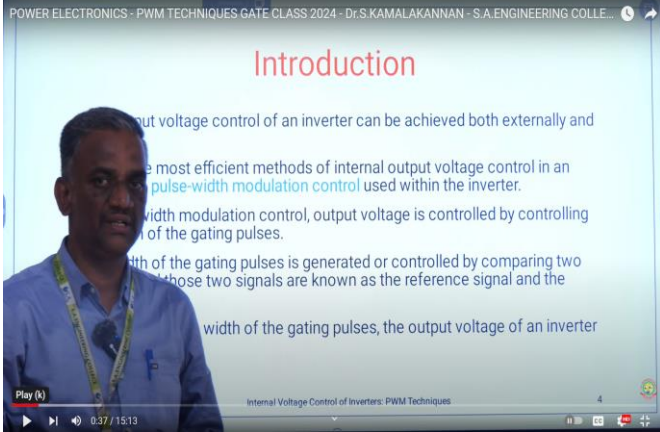
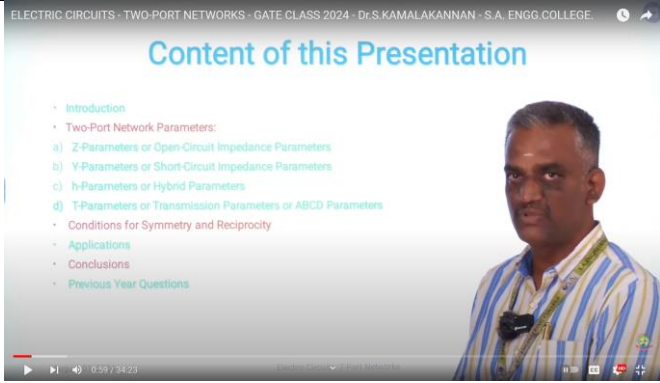
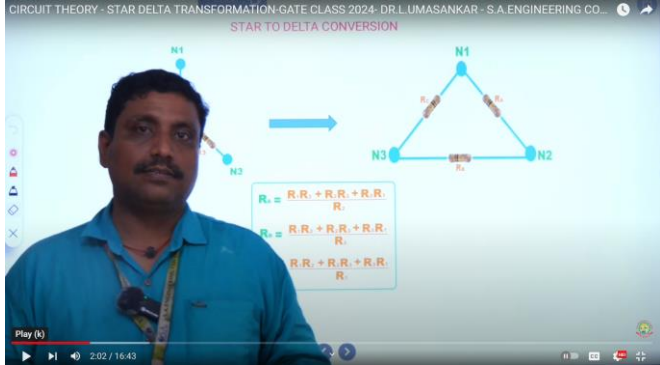
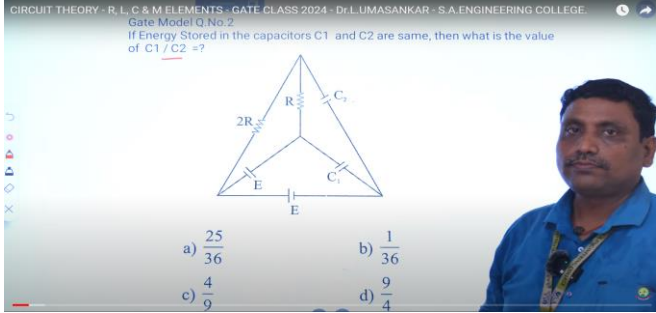
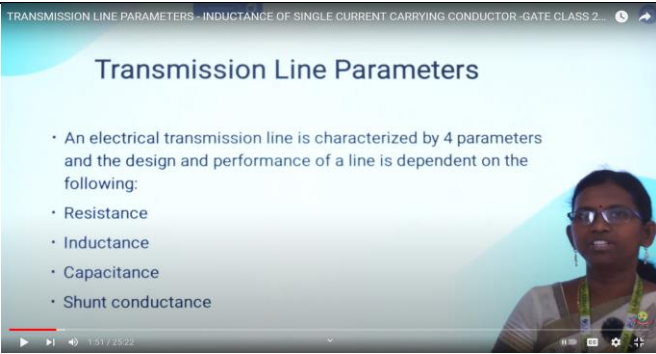
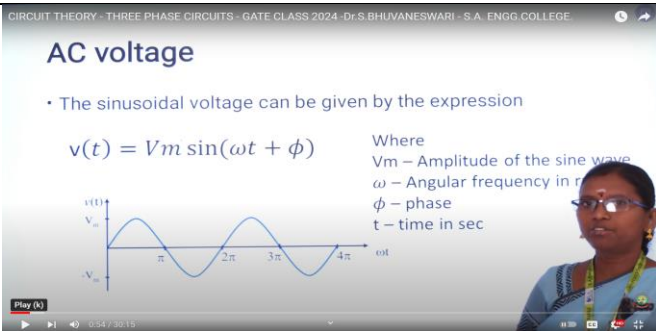



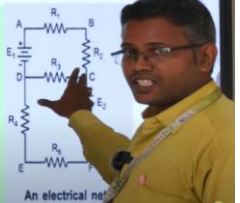
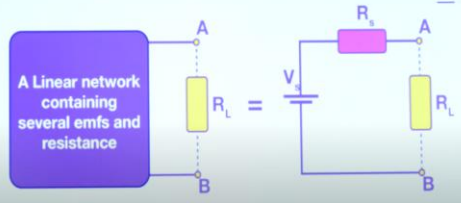
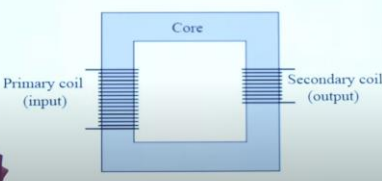
S.A. Engineering College (Autonomous), Chennai-600 077.

Department of Electrical and Electronics Engineering

YouTube Uploaded Videos

S. No.	Topic: Subtopic	Name of the Staff Member	URL
1	Power Electronics: PWM Techniques	Dr. S. Kamalakkannan	 <p>POWER ELECTRONICS - PWM TECHNIQUES GATE CLASS 2024 - Dr.S.KAMALAKANNAN - S.A.ENGINEERING COLLEGE...</p> <p align="center">Introduction</p> <p>...ut voltage control of an inverter can be achieved both externally and</p> <p>...e most efficient methods of internal output voltage control in an</p> <p>...pulse-width modulation control used within the inverter.</p> <p>...width modulation control, output voltage is controlled by controlling</p> <p>...of the gating pulses.</p> <p>...th of the gating pulses is generated or controlled by comparing two</p> <p>... those two signals are known as the reference signal and the</p> <p>... width of the gating pulses, the output voltage of an inverter</p> <p>Internal Voltage Control of Inverters: PWM Techniques</p> <p>https://youtu.be/7XqTc9grTnI?si=FYg-38kpaoakmnX</p>
2	Electric Circuits: 2-Port Networks		 <p>ELECTRIC CIRCUITS - TWO-PORT NETWORKS - GATE CLASS 2024 - Dr.S.KAMALAKANNAN - S.A. ENGG.COLLEGE...</p> <p align="center">Content of this Presentation</p> <ul style="list-style-type: none"> Introduction Two-Port Network Parameters: <ol style="list-style-type: none"> Z-Parameters or Open-Circuit Impedance Parameters Y-Parameters or Short-Circuit Impedance Parameters h-Parameters or Hybrid Parameters T-Parameters or Transmission Parameters or ABCD Parameters Conditions for Symmetry and Reciprocity Applications Conclusions Previous Year Questions <p>https://www.youtube.com/watch?v=d0Ae9qLjehA</p>
3	Electric Circuits: Star Delta Transformation	Dr. L. Umasankar	 <p>CIRCUIT THEORY - STAR DELTA TRANSFORMATION-GATE CLASS 2024- DR.L.UMASANKAR - S.A. ENGINEERING CO...</p> <p align="center">STAR TO DELTA CONVERSION</p> <p>$R_1 = \frac{R_1 R_2 + R_1 R_3 + R_2 R_3}{R_3}$</p> <p>$R_2 = \frac{R_1 R_2 + R_1 R_3 + R_2 R_3}{R_2}$</p> <p>$R_3 = \frac{R_1 R_2 + R_1 R_3 + R_2 R_3}{R_1}$</p> <p>https://www.youtube.com/watch?v=eGcTVXSaYs4</p>

4	Electric Circuits: R, L, C, and M Elements		 <p>https://www.youtube.com/watch?v=Zal7uj3oXK4</p>
5	Power Systems: Transmission Line Parameters	Dr. S. Bhuvaneswari	 <p>https://youtu.be/K4hVya7nljg?si=q1FckBAoIv1T8wX5</p>
6	Electric Circuits: 3-Phase Circuits	Dr. S. Bhuvaneswari	 <p>https://youtu.be/ZlydRJW_z7I?si=9JE6lSD9paPvNdMs</p>
7	Power Systems: Comparison of AC and DC Transmission	Dr. G. Muralikrishnan	 <p>https://youtu.be/1eN7bcNhNV8?si=R5wIK6KZFHTyj170</p>

8	Electric Circuits: Network solution methods: KCL, KVL		<p>ELECTRIC CIRCUITS - KVL, KCL - GATE CLASS 2024 - Dr.G.MURALIKRISHNAN - S.A ENGG. COLLEGE</p> <h3>Network Terminology</h3> <p>3 Branch A part of the network which connects the various points of the network with one another is called a branch. In the Fig. AB, BC, CD, DA, DE, CF and EF are the various branches. A branch may consist more than one element.</p> <p>4 Junction Point A point where three or more branches meet is called a junction point. Point D and C are the junction points in the network shown in the Fig.</p> <p>5 Node A point at which two or more elements are joined together is called node. The junction points are also the nodes of the network. In the network shown in the Fig. A, B, C, D, E and F are the nodes of the network.</p>  <p>https://www.youtube.com/watch?v=6sH9BRwjo3I</p>
9	Electric Circuits: Thevenin's Theorem	Mrs. S. Bharathi	<p>THEVENIN'S THEOREM-GATE PROBLEM - Ms.S.BHARATHI-S.A. ENGINEERING COLLEGE</p> <h3>Thevenin's Theorem</h3> <p>A Linear network containing several emfs and resistance</p>  <p>https://www.youtube.com/watch?v=mQCXGf9n4V4</p>
10	Electrical Machines: 1- Phase Transformer	Mrs. A. Prabha	<p>ELECTRICAL MACHINES - SINGLE PHASE TRANSFORMER-GATE CLASS 2024 - Mrs.A.PRABHA</p> <p>A Transformer is a static electrical machine which transfers AC electrical power from one circuit to the other circuit at the constant frequency, but the voltage level can be altered that means voltage can be increased or decreased according to the requirement.</p>  <p>https://youtu.be/GcDS1-zSthI?si=dyntfDrUJBv0U7N</p>
11	Electric Circuits: Resonance	Mrs. A. Prabha	<p>CIRCUIT THEORY - RESONANCE ELECTRIC CIRCUITS- GATE CLASS 2024 - Ms.A.PRABHA - S.A. ENGG. COLLEGE.</p> <h3>RESONANCE IN ELECTRIC CIRCUITS</h3> <p>Resonance in an electrical circuit occurs when the circuit's inductive reactance (X_L) and capacitive reactance (X_C) are equal in magnitude but opposite in phase, resulting in a purely resistive impedance at a particular frequency.</p> <p>Electrical resonance is an important factor in designing circuits for specific frequency operations, such as in radio transmitter and receivers.</p> <p>Types of Resonant Circuits:</p> <ul style="list-style-type: none"> Series Resonance Parallel Resonance <p>https://www.youtube.com/watch?v=SsyF-jyNFYs</p>