

# I PUC PHYSICS

Chapter No	CHAPTERS	SUB TOPIC	RELATED LINKS	
3	MOTION IN A STRAIGHT LINE	a	Difference between distance and displacement	<a href="https://www.youtube.com/watch?v=SnSULO322VA">https://www.youtube.com/watch?v=SnSULO322VA</a>
		b	Average velocity and average speed	<a href="https://www.youtube.com/watch?v=gzJ1L_aLX2o">https://www.youtube.com/watch?v=gzJ1L_aLX2o</a>
		c	Instantaneous velocity	<a href="https://www.youtube.com/watch?v=XxTb17Eov7k">https://www.youtube.com/watch?v=XxTb17Eov7k</a>
		d	Relative velocity	<a href="https://www.youtube.com/watch?v=s1KX_BSIGLo">https://www.youtube.com/watch?v=s1KX_BSIGLo</a>
		e		
4	MOTION IN A PLANE	a	Scalars and vectors	<a href="https://www.youtube.com/watch?v=4Dj1r78VmTY">https://www.youtube.com/watch?v=4Dj1r78VmTY</a>
		b	Vector addition:	<a href="https://phet.colorado.edu/sims/vector-addition/vector-addition_en.html">https://phet.colorado.edu/sims/vector-addition/vector-addition_en.html</a>
		c	Cross product and dot product of vectors	<a href="https://www.youtube.com/watch?v=hoNJK4mE1JU">https://www.youtube.com/watch?v=hoNJK4mE1JU</a>
		d	Resolution of vectors	<a href="https://www.youtube.com/watch?v=mVrCoE32orc">https://www.youtube.com/watch?v=mVrCoE32orc</a>
		e	Projectile motion	<a href="https://phet.colorado.edu/en/simulation/projectile-motion">https://phet.colorado.edu/en/simulation/projectile-motion</a>
		f	2 Dimension motion	<a href="https://phet.colorado.edu/en/simulation/legacy/motion-2d">https://phet.colorado.edu/en/simulation/legacy/motion-2d</a>
		g		
5	LAWS OF MOTION	a	Impulsive force	<a href="https://www.youtube.com/watch?v=gvCbivoZKXk">https://www.youtube.com/watch?v=gvCbivoZKXk</a>
		b	Aristotles fallacy	<a href="https://youtu.be/XQWl88q4WNk?t=2">https://youtu.be/XQWl88q4WNk?t=2</a>
		c	Newtons first law of motion	<a href="https://www.youtube.com/watch?v=Za3DGUEpW2U">https://www.youtube.com/watch?v=Za3DGUEpW2U</a>
		d	Linear momentum	<a href="https://www.youtube.com/watch?v=XFhntPxwoU">https://www.youtube.com/watch?v=XFhntPxwoU</a>
		e	Newtons second law of motion	<a href="https://youtu.be/AFwbcWIUwLQ?t=2">https://youtu.be/AFwbcWIUwLQ?t=2</a>
		f	Newtons third law of motion	<a href="https://www.youtube.com/watch?v=hyX_mWdpsfI">https://www.youtube.com/watch?v=hyX_mWdpsfI</a>
		g	Impulsive force	<a href="https://www.youtube.com/watch?v=ph48Xwj_eS8">https://www.youtube.com/watch?v=ph48Xwj_eS8</a>
		h	Impulse	<a href="https://www.youtube.com/watch?v=E13h1E_Pcoo">https://www.youtube.com/watch?v=E13h1E_Pcoo</a>
		i	Law of conservation of momentum	<a href="https://www.youtube.com/watch?v=3WX7bweJK-k">https://www.youtube.com/watch?v=3WX7bweJK-k</a>
		j	Friction	<a href="https://www.youtube.com/watch?v=fo_pmp5rtzo">https://www.youtube.com/watch?v=fo_pmp5rtzo</a>
		k	Causes for friction	<a href="https://www.youtube.com/watch?v=ZF5OSTMhMWg">https://www.youtube.com/watch?v=ZF5OSTMhMWg</a>
		l	Types of friction	<a href="https://youtu.be/3tCUkwTHlMA?t=4">https://youtu.be/3tCUkwTHlMA?t=4</a>
		m	Laws of friction	<a href="https://www.youtube.com/watch?v=bDfvDjM2JLc">https://www.youtube.com/watch?v=bDfvDjM2JLc</a>
		n	Methods of reducing friction	<a href="https://www.youtube.com/watch?v=x19oTPvZSUK">https://www.youtube.com/watch?v=x19oTPvZSUK</a>
		o	Banking of roads	<a href="https://www.youtube.com/watch?v=nXm5Sw4QEsc">https://www.youtube.com/watch?v=nXm5Sw4QEsc</a>
		p	Necessity of banking of roads	<a href="https://www.youtube.com/watch?v=pvlnVJ1vhp8">https://www.youtube.com/watch?v=pvlnVJ1vhp8</a>
		q	Factors affecting the friction	<a href="https://youtu.be/vbpFEB6Mt88?t=6">https://youtu.be/vbpFEB6Mt88?t=6</a>
6	WORK POWER AND ENERGY	a	Scalar product of two vectors	<a href="https://www.youtube.com/watch?v=3CStgCozYoE">https://www.youtube.com/watch?v=3CStgCozYoE</a> <a href="http://phys23p.sl.psu.edu/phys_anim/vectors/vector_dot.avi">http://phys23p.sl.psu.edu/phys_anim/vectors/vector_dot.avi</a>
		b	Work-energy theorem	<a href="https://www.youtube.com/watch?v=e68G2H3vRo0&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=30">https://www.youtube.com/watch?v=e68G2H3vRo0&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=30</a>
		c	Work done by a variable force	<a href="https://www.youtube.com/watch?v=Jgn1F1h4gQ4&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=31">https://www.youtube.com/watch?v=Jgn1F1h4gQ4&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=31</a>
		d	Potential energy	<a href="https://www.youtube.com/watch?v=Jgn1F1h4gQ4&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=31">https://www.youtube.com/watch?v=Jgn1F1h4gQ4&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=31</a>
		e	Conservation of energy	<a href="https://phet.colorado.edu/sims/html/energy-skate-park-basics/latest/energy-skate-park-basics_en.html">https://phet.colorado.edu/sims/html/energy-skate-park-basics/latest/energy-skate-park-basics_en.html</a> <a href="http://techtv.mit.edu/collections/physicsdemos/videos/1491-potential-energy-to-kinetic-energy">http://techtv.mit.edu/collections/physicsdemos/videos/1491-potential-energy-to-kinetic-energy</a> <a href="https://www.youtube.com/watch?v=d4K6ATZSJwk">https://www.youtube.com/watch?v=d4K6ATZSJwk</a> <a href="https://phet.colorado.edu/en/simulation/legacy/the-ramp">https://phet.colorado.edu/en/simulation/legacy/the-ramp</a>
				<a href="https://www.youtube.com/watch?v=avH8M1Muhgw&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=34">https://www.youtube.com/watch?v=avH8M1Muhgw&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=34</a>
				<a href="https://www.youtube.com/watch?v=9TJnBKLdg3M&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=32">https://www.youtube.com/watch?v=9TJnBKLdg3M&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=32</a>
				<a href="http://phys23p.sl.psu.edu/phys_anim/mech/ramp_n_jump.avi">http://phys23p.sl.psu.edu/phys_anim/mech/ramp_n_jump.avi</a>
				<a href="https://phet.colorado.edu/en/simulation/legacy/energy-skate-park">https://phet.colorado.edu/en/simulation/legacy/energy-skate-park</a>
				<a href="http://phys23p.sl.psu.edu/phys_anim/mech/ramped.avi">http://phys23p.sl.psu.edu/phys_anim/mech/ramped.avi</a>
		f	Collisions	<a href="https://phet.colorado.edu/en/simulation/legacy/collision-lab">https://phet.colorado.edu/en/simulation/legacy/collision-lab</a> <a href="https://www.youtube.com/watch?v=2kID8vIAGXU&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=35">https://www.youtube.com/watch?v=2kID8vIAGXU&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=35</a> <a href="http://techtv.mit.edu/collections/physicsdemos/videos/3098-two-dimensional-collisions">http://techtv.mit.edu/collections/physicsdemos/videos/3098-two-dimensional-collisions</a>
		g	Sources of energy	<a href="http://www.sciencetuts.com/subjects/1/courses/source-of-energy">http://www.sciencetuts.com/subjects/1/courses/source-of-energy</a>
		h	Spring potential energy	<a href="https://phet.colorado.edu/sims/html/hookes-law/latest/hookes-law_en.html">https://phet.colorado.edu/sims/html/hookes-law/latest/hookes-law_en.html</a>
i	Power	<a href="https://www.youtube.com/watch?v=wdyoMHfGBOM&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=33">https://www.youtube.com/watch?v=wdyoMHfGBOM&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=33</a> <a href="https://youtu.be/avH8M1Muhgw?list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;t=616">https://youtu.be/avH8M1Muhgw?list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;t=616</a>		

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7	SYSTEM OF PARTICLES AND ROTATIONAL MOTION	a	Rigid bodis	<a href="https://www.youtube.com/watch?v=rpY8B4WSInY&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=36">https://www.youtube.com/watch?v=rpY8B4WSInY&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=36</a>
		b	Centre of mass	<a href="https://www.youtube.com/watch?v=6EDAb0oD8Oo&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=37">https://www.youtube.com/watch?v=6EDAb0oD8Oo&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=37</a>
				<a href="https://www.youtube.com/watch?v=DmSsH_VcOoE&amp;index=43&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w">https://www.youtube.com/watch?v=DmSsH_VcOoE&amp;index=43&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w</a>
		c	Motion of centre of mass	<a href="http://techtv.mit.edu/collections/physicsdemos/videos/3052-center-of-mass-trajectory">http://techtv.mit.edu/collections/physicsdemos/videos/3052-center-of-mass-trajectory</a>
				<a href="https://www.youtube.com/watch?v=RrvxDtJtcYk&amp;index=38&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w">https://www.youtube.com/watch?v=RrvxDtJtcYk&amp;index=38&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w</a>
		d	Gyroscope	<a href="http://techtv.mit.edu/collections/physicsdemos/videos/717-mit-physics-demo-bicycle-wheel-gyroscope">http://techtv.mit.edu/collections/physicsdemos/videos/717-mit-physics-demo-bicycle-wheel-gyroscope</a>
		e	Torque	<a href="https://phet.colorado.edu/en/simulation/legacy/torque">https://phet.colorado.edu/en/simulation/legacy/torque</a>
				<a href="https://www.youtube.com/watch?v=9dCLduXXmzU&amp;index=41&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w">https://www.youtube.com/watch?v=9dCLduXXmzU&amp;index=41&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w</a>
		f	Moment of inertia	<a href="https://phet.colorado.edu/en/simulation/legacy/torque">https://phet.colorado.edu/en/simulation/legacy/torque</a>
				<a href="https://www.youtube.com/watch?v=Xi2YWmqCD-Y&amp;index=44&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w">https://www.youtube.com/watch?v=Xi2YWmqCD-Y&amp;index=44&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w</a>
				<a href="https://www.youtube.com/watch?v=TAOR_BOoO1A&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=45">https://www.youtube.com/watch?v=TAOR_BOoO1A&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=45</a>
				<a href="https://en.m.wikipedia.org/wiki/File:Rolling_Racers_-_Moment_of_inertia.gif">https://en.m.wikipedia.org/wiki/File:Rolling_Racers_-_Moment_of_inertia.gif</a>
		g	Laws of moment of inertia	<a href="https://www.youtube.com/watch?v=hNokxL4RBIA&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=46">https://www.youtube.com/watch?v=hNokxL4RBIA&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=46</a>
		h	Angular velocity and acceleration	<a href="https://www.youtube.com/watch?v=i_UTQYkYBGo&amp;index=40&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w">https://www.youtube.com/watch?v=i_UTQYkYBGo&amp;index=40&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w</a>
		i	Angular momentum	<a href="https://phet.colorado.edu/en/simulation/legacy/torque">https://phet.colorado.edu/en/simulation/legacy/torque</a>
				<a href="https://www.youtube.com/watch?v=9dCLduXXmzU&amp;index=41&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w">https://www.youtube.com/watch?v=9dCLduXXmzU&amp;index=41&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w</a>
		j	Conservation of angular momentum	<a href="https://www.youtube.com/watch?v=ZB8saDipeoY&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=49">https://www.youtube.com/watch?v=ZB8saDipeoY&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=49</a>
k	Vector product of two vectors	<a href="https://www.youtube.com/watch?v=hoNJK4mELJU&amp;t=55s">https://www.youtube.com/watch?v=hoNJK4mELJU&amp;t=55s</a>		
		<a href="https://www.youtube.com/watch?v=em6m6icf5wA">https://www.youtube.com/watch?v=em6m6icf5wA</a>		
		<a href="https://www.youtube.com/watch?v=ckzNaCOsRKE&amp;index=39&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w">https://www.youtube.com/watch?v=ckzNaCOsRKE&amp;index=39&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w</a>		
l	Scalar product v/s vector product	<a href="https://www.youtube.com/watch?v=E34CftP455k">https://www.youtube.com/watch?v=E34CftP455k</a>		
m	Equilibrium of a rigid body	<a href="https://www.youtube.com/watch?v=i6PTVYcEOAO&amp;index=42&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w">https://www.youtube.com/watch?v=i6PTVYcEOAO&amp;index=42&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w</a>		
n	Kinematics of rotational motion	<a href="https://www.youtube.com/watch?v=PmOsdhI_YVI&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=47">https://www.youtube.com/watch?v=PmOsdhI_YVI&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=47</a>		
o	Rolling motion	<a href="https://www.youtube.com/watch?v=ibMeZ4-pXZI&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=50">https://www.youtube.com/watch?v=ibMeZ4-pXZI&amp;list=PLNz32RYOjBeqSWcTJGsBtlUxENW-Ki_w&amp;index=50</a>		
8	GRAVITATION	a	Gravitation	<a href="https://study.com/academy/lesson/gravitational-field-definition-formula-quiz.html">https://study.com/academy/lesson/gravitational-field-definition-formula-quiz.html</a>
		b	Universal law of gravitation	<a href="https://www.youtube.com/watch?v=Bnfcak_qaQ">https://www.youtube.com/watch?v=Bnfcak_qaQ</a>
		c	Gravitational constannt	<a href="https://www.youtube.com/watch?v=7ymoYwItyMw">https://www.youtube.com/watch?v=7ymoYwItyMw</a>
		d	Acceleration due to gravity and its variation	<a href="https://www.youtube.com/watch?v=z9Q_ZveeUo">https://www.youtube.com/watch?v=z9Q_ZveeUo</a>
		e	Relation between G and g	<a href="https://www.youtube.com/watch?v=nPEXa-en2I">https://www.youtube.com/watch?v=nPEXa-en2I</a>
		f	Keplers lawsof planetary motion.	<a href="https://www.youtube.com/watch?v=6TGCpXhMLtU">https://www.youtube.com/watch?v=6TGCpXhMLtU</a>
		g	Satellites	<a href="https://www.youtube.com/watch?v=ICLjOuoXGHQ">https://www.youtube.com/watch?v=ICLjOuoXGHQ</a>
		h	Earth satellites/ natutal/artificial	<a href="https://www.youtube.com/watch?v=96VsdSR_Jro">https://www.youtube.com/watch?v=96VsdSR_Jro</a>
		i	Geostationary satellites	<a href="https://www.youtube.com/watch?v=Hcm7oQwpZfg">https://www.youtube.com/watch?v=Hcm7oQwpZfg</a>
		j	Polar satellites	<a href="https://www.youtube.com/watch?v=rFE_uWxdRR1">https://www.youtube.com/watch?v=rFE_uWxdRR1</a>
		k	IRS satellites.	<a href="https://www.youtube.com/watch?v=LxtMLC5dmkw">https://www.youtube.com/watch?v=LxtMLC5dmkw</a>
		l	Orbital speed of earth satellites	<a href="https://www.youtube.com/watch?v=nxD7koHdQhM">https://www.youtube.com/watch?v=nxD7koHdQhM</a>
		m	Gravitational field	<a href="https://www.youtube.com/watch?v=j29_nDDoWeA">https://www.youtube.com/watch?v=j29_nDDoWeA</a>
		n	Escape speed	<a href="https://www.youtube.com/watch?v=7w56rwATUZU">https://www.youtube.com/watch?v=7w56rwATUZU</a>
		o	Weightlessness	<a href="https://www.youtube.com/watch?v=vsdglvr7s7E">https://www.youtube.com/watch?v=vsdglvr7s7E</a>
9	MECHANICAL PROPERTIES OF SOLIDS	a	Elastic behavior	<a href="http://www.sciencetuts.com/subjects/elasticity/video">http://www.sciencetuts.com/subjects/elasticity/video</a>
			Stress, Strain	<a href="https://www.youtube.com/watch?v=kCGGKlRlU2M">https://www.youtube.com/watch?v=kCGGKlRlU2M</a>
		b	Hookes law	<a href="http://www.sciencetuts.com/subjects/hooke-s-law/video">http://www.sciencetuts.com/subjects/hooke-s-law/video</a>
		c	Moduli of elasticity	<a href="http://www.sciencetuts.com/subjects/hooke-s-law/video">http://www.sciencetuts.com/subjects/hooke-s-law/video</a>
		d	poisson ratio	<a href="https://www.youtube.com/watch?v=hBnZrBhnzVo">https://www.youtube.com/watch?v=hBnZrBhnzVo</a>
		e	Measurement of young's modulus	<a href="https://www.youtube.com/watch?v=50VYcOrvCXo">https://www.youtube.com/watch?v=50VYcOrvCXo</a>
		f	Application of elasticity	<a href="http://www.sciencetuts.com/subjects/hooke-s-law/video">http://www.sciencetuts.com/subjects/hooke-s-law/video</a>
10	MECHANICAL PROPERTIES OF FLUIDS	a	Pascal's law	<a href="http://www.sciencetuts.com/subjects/mechanical-properties-of-fluids/course">http://www.sciencetuts.com/subjects/mechanical-properties-of-fluids/course</a>
		b	Fluid Pressure	<a href="https://www.youtube.com/watch?v=A3ormVYZMXE">https://www.youtube.com/watch?v=A3ormVYZMXE</a>
		c	Archimedes-principle	<a href="https://www.brightstorm.com/science/physics/solids-liquids-and-gases/archimedes-principle/">https://www.brightstorm.com/science/physics/solids-liquids-and-gases/archimedes-principle/</a>
		d	Equation of continuity	<a href="https://www.brightstorm.com/science/physics/solids-liquids-and-gases/continuity-equation/">https://www.brightstorm.com/science/physics/solids-liquids-and-gases/continuity-equation/</a>
		e	Stokes law	<a href="https://www.youtube.com/watch?v=UJ3-Zm1wbIQ">https://www.youtube.com/watch?v=UJ3-Zm1wbIQ</a>
		f	Reynolds number	<a href="https://www.youtube.com/watch?v=pae5WrmDzUU">https://www.youtube.com/watch?v=pae5WrmDzUU</a>

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		g Terminal velocity,	<a href="https://www.youtube.com/watch?v=RBwwbR3P5AY&amp;t=82s">https://www.youtube.com/watch?v=RBwwbR3P5AY&amp;t=82s</a>
		h streamline and turbulent flow	<a href="https://www.youtube.com/watch?v=qtvVN2qt068">https://www.youtube.com/watch?v=qtvVN2qt068</a>
		Bernoulli's Principle	<a href="https://www.youtube.com/watch?v=xIsAALCPPIk">https://www.youtube.com/watch?v=xIsAALCPPIk</a>
		applications of bernoulli's principle	<a href="https://www.youtube.com/watch?v=YyR8aioQRU">https://www.youtube.com/watch?v=YyR8aioQRU</a>
		i Measurement of surface tension	<a href="https://www.youtube.com/watch?v=YzG7poiF5hE">https://www.youtube.com/watch?v=YzG7poiF5hE</a>
		j angle of contact	<a href="https://www.youtube.com/watch?v=xrJfChqjEZI">https://www.youtube.com/watch?v=xrJfChqjEZI</a>
		k Viscosity and Stokes' Law	<a href="http://www.schoolphysics.co.uk/animations/Properties%20of%20matter%20animations/Stokes_law/index.html">http://www.schoolphysics.co.uk/animations/Properties%20of%20matter%20animations/Stokes_law/index.html</a>
11	THERMAL PROPERTIES OF MATTER	m Measurement of surface tension	<a href="https://www.youtube.com/watch?v=YzG7poiF5hE">https://www.youtube.com/watch?v=YzG7poiF5hE</a>
		a Heat & Temperature	<a href="http://www.scientuts.com/subjects/thermal-properties-of-matter/course">http://www.scientuts.com/subjects/thermal-properties-of-matter/course</a>
		b Measurement of temperature	<a href="http://www.scientuts.com/subjects/measurement-of-temperature/video">http://www.scientuts.com/subjects/measurement-of-temperature/video</a>
		c Heat transfer	<a href="http://www.scientuts.com/subjects/heat-transfer/video">http://www.scientuts.com/subjects/heat-transfer/video</a>
		d Thermal expansion of solids, liquids, and gases.	<a href="https://www.youtube.com/watch?v=qqHUhtFBWrk">https://www.youtube.com/watch?v=qqHUhtFBWrk</a>
		e Anomalous expansion.	<a href="https://www.youtube.com/watch?v=UL3jYLE2aaw">https://www.youtube.com/watch?v=UL3jYLE2aaw</a>
		f Specific heat capacity	<a href="http://www.scientuts.com/subjects/specific-heat-capacity/video">http://www.scientuts.com/subjects/specific-heat-capacity/video</a>
		g change of state – latent heat	<a href="http://www.scientuts.com/subjects/change-of-state/video">http://www.scientuts.com/subjects/change-of-state/video</a>
		h Black Body Radiation	<a href="https://www.youtube.com/watch?v=h5iOAw57OXM">https://www.youtube.com/watch?v=h5iOAw57OXM</a>
		i Green House effect.	<a href="https://www.youtube.com/watch?v=BPJJM_hCFiq">https://www.youtube.com/watch?v=BPJJM_hCFiq</a>
		j Newton's law of cooling	<a href="https://www.youtube.com/watch?v=IICR-wjYcA">https://www.youtube.com/watch?v=IICR-wjYcA</a>
12	THERMODYNAMICS	a Thermodynamics equilibrium and zeroth law	<a href="https://youtu.be/UPm1B7wG1Wc">https://youtu.be/UPm1B7wG1Wc</a>
		b Heat, internal energy and work	<a href="https://youtu.be/uAO2MtzaHKO">https://youtu.be/uAO2MtzaHKO</a>
		c 1st law of thermodynamics	<a href="https://youtu.be/TWGE_72RpVg">https://youtu.be/TWGE_72RpVg</a>
		d Thermodynamic state variable and equation	<a href="https://youtu.be/msesiRr3Qvw">https://youtu.be/msesiRr3Qvw</a>
		e thermodynamic process	<a href="https://youtu.be/uN3TQ8zPtKk">https://youtu.be/uN3TQ8zPtKk</a>
		f Heat engine and refrigerator	<a href="https://youtu.be/iHvgTZGHRUw">https://youtu.be/iHvgTZGHRUw</a>
		g 2nd law of thermodynamics	<a href="https://youtu.be/7W4vHq34oUs">https://youtu.be/7W4vHq34oUs</a>
		h reversible and irreversible process	<a href="https://youtu.be/kbR3uB68qCE">https://youtu.be/kbR3uB68qCE</a>
		i Carnot's engine	<a href="https://youtu.be/J_JTeof_fmo">https://youtu.be/J_JTeof_fmo</a>
		Thermodynamics MIT lectures	<a href="http://web.mit.edu/16.unified/www/FALL/thermodynamics/">http://web.mit.edu/16.unified/www/FALL/thermodynamics/</a> <a href="https://www.britannica.com/science/thermodynamics">https://www.britannica.com/science/thermodynamics</a>
13	KINETIC THEORY OF GASES	a Molecular nature of matter	<a href="https://youtu.be/vJu7OCrz-ww">https://youtu.be/vJu7OCrz-ww</a>
		b Behaviour of gases	<a href="https://youtu.be/BxUS1K7xu30">https://youtu.be/BxUS1K7xu30</a>
		c Kinetic theory of an ideal gas	<a href="https://www.youtube.com/playlist?list=PL35B1F31087FA9742">https://www.youtube.com/playlist?list=PL35B1F31087FA9742</a>
		d Law of equipartition of energy	<a href="https://youtu.be/CojisTFZUOc">https://youtu.be/CojisTFZUOc</a>
		e Specific heat capacity	<a href="https://youtu.be/x6V-8rYNuss">https://youtu.be/x6V-8rYNuss</a>
		f Mean free path	<a href="https://youtu.be/vU103BS-zM">https://youtu.be/vU103BS-zM</a>
14	OSCILLATIONS	a Periodic motion	<a href="https://youtu.be/uM2HpLBVAkA">https://youtu.be/uM2HpLBVAkA</a>
		b Oscillatory motion	<a href="https://youtu.be/gZ_KnZHCn4M">https://youtu.be/gZ_KnZHCn4M</a>
		c Simple harmonic motion	<a href="https://youtu.be/tudxily5Qu0">https://youtu.be/tudxily5Qu0</a>
		d Damped simple harmonic motion	<a href="https://youtu.be/1K5p9DfsXGo">https://youtu.be/1K5p9DfsXGo</a>
			<a href="https://youtu.be/HRcjVaiLfm">https://youtu.be/HRcjVaiLfm</a>
			<a href="https://youtu.be/RYKJo2iAz74">https://youtu.be/RYKJo2iAz74</a>
			<a href="https://youtu.be/KRNlvovahPU">https://youtu.be/KRNlvovahPU</a>
			<a href="https://youtu.be/xuH2Ul271aE">https://youtu.be/xuH2Ul271aE</a>
		e Forced oscillation	<a href="https://youtu.be/SToQlbytnBQ">https://youtu.be/SToQlbytnBQ</a>
			<a href="https://youtu.be/lXyG68_caV4">https://youtu.be/lXyG68_caV4</a>
15	WAVES	a Transverse waves	<a href="https://youtu.be/-iO81v42dOA">https://youtu.be/-iO81v42dOA</a>
		b Longitudinal waves	<a href="https://youtu.be/pqJzn8Y1HFw">https://youtu.be/pqJzn8Y1HFw</a>
		c Progressive wave	<a href="https://youtu.be/bvTxub3-21U">https://youtu.be/bvTxub3-21U</a>
		d Principle of superposition of waves	<a href="https://youtu.be/hnZ1FKVWN4k">https://youtu.be/hnZ1FKVWN4k</a>
		e Beats	<a href="https://youtu.be/muLrRChUQY">https://youtu.be/muLrRChUQY</a>
			<a href="https://youtu.be/4a7BdvYa17s">https://youtu.be/4a7BdvYa17s</a>
		f Doppler effect of sound	<a href="https://youtu.be/dc717Oqa8xk">https://youtu.be/dc717Oqa8xk</a>

# II PUC PHYSICS

## II PUC PHYSICS

SLNO	CHAPTERS	SUB TOPIC	RELATED LINKS	
1	ELECTRIC CHARGES AND FIELDS	1	Electric charges	<a href="https://www.youtube.com/watch?v=B3BsevXKZEE&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl&amp;index=1">https://www.youtube.com/watch?v=B3BsevXKZEE&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl&amp;index=1</a> <a href="https://youtu.be/ViZNgU-Yt-Y">https://youtu.be/ViZNgU-Yt-Y</a>
		2	Conductors and Insulators	<a href="https://youtu.be/ZgDIX2GOaxO">https://youtu.be/ZgDIX2GOaxO</a>
		3	Charge basic	<a href="https://youtu.be/W1KEgBdatN8">https://youtu.be/W1KEgBdatN8</a>
		4	Quantization of charge Charging by induction	<a href="https://youtu.be/aPaVvCW9rBU">https://youtu.be/aPaVvCW9rBU</a> <a href="https://www.youtube.com/watch?v=qgr_q8Txr-0">https://www.youtube.com/watch?v=qgr_q8Txr-0</a>
		5	Coulomb's law	<a href="https://www.youtube.com/watch?v=YZNtIadRR5M&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl&amp;index=5">https://www.youtube.com/watch?v=YZNtIadRR5M&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl&amp;index=5</a>
		6	Conservation of charge	<a href="https://youtu.be/Sn5CwAODVdI">https://youtu.be/Sn5CwAODVdI</a>
		7	Properties of charges	<a href="https://www.youtube.com/watch?v=OZ5TpinkVuo&amp;index=3&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=OZ5TpinkVuo&amp;index=3&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
		8	Coulomb's law	<a href="http://webphysics.davidson.edu/physlet_resource/bu_semester2/menu_semester2.html">http://webphysics.davidson.edu/physlet_resource/bu_semester2/menu_semester2.html</a>
		9	Coulomb's law	<a href="https://www.youtube.com/watch?v=hgJkNaUVos&amp;index=4&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=hgJkNaUVos&amp;index=4&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
		10	Electric field	<a href="https://youtu.be/oYOGrTNgGhE">https://youtu.be/oYOGrTNgGhE</a>
		11	Electric field direction	<a href="https://youtu.be/Z_ddimEdmCO">https://youtu.be/Z_ddimEdmCO</a>
		12	Continuous charge distributions	<a href="https://www.youtube.com/watch?v=ZrvAxMA6HZM&amp;index=7&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=ZrvAxMA6HZM&amp;index=7&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
		13	Electric field lines	<a href="https://www.youtube.com/watch?v=R9WoeLcqa14&amp;index=6&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=R9WoeLcqa14&amp;index=6&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a> <a href="https://www.youtube.com/watch?v=LB8Rhc4eQM">https://www.youtube.com/watch?v=LB8Rhc4eQM</a>
		14	Electric flux	<a href="https://www.youtube.com/watch?v=4Xtu-DiV_Zg&amp;index=8&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=4Xtu-DiV_Zg&amp;index=8&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
		15	Gauss law	<a href="https://www.youtube.com/watch?v=4cVUPVqV1rk&amp;index=9&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=4cVUPVqV1rk&amp;index=9&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
		16	Applications of Gauss law	<a href="https://www.youtube.com/watch?v=OCRzNIWiwsc&amp;index=10&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=OCRzNIWiwsc&amp;index=10&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a> <a href="https://youtu.be/RGeR1ztOMo">https://youtu.be/RGeR1ztOMo</a> <a href="https://youtu.be/Zu2gomaDgnM">https://youtu.be/Zu2gomaDgnM</a>
		17	Electric dipole	<a href="https://www.youtube.com/watch?v=d8Got2APSHs&amp;index=11&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=d8Got2APSHs&amp;index=11&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a> <a href="https://youtu.be/-RboguSEeVE">https://youtu.be/-RboguSEeVE</a>
2	Electrostatic Potential and Capacitance	1	Electric Potential	<a href="https://youtu.be/IvAnzZgwcFQ">https://youtu.be/IvAnzZgwcFQ</a> <a href="https://youtu.be/z8qfhFXisrw">https://youtu.be/z8qfhFXisrw</a>
		2	Potential due to a point charge	<a href="https://youtu.be/GdDc3hQosuk">https://youtu.be/GdDc3hQosuk</a>
		3	Potential due to dipole	<a href="https://youtu.be/1i2kylvNZ2o">https://youtu.be/1i2kylvNZ2o</a>
		4	Equipotential surfaces	<a href="https://youtu.be/mJxAlNAiTds">https://youtu.be/mJxAlNAiTds</a>
		5	Equipotential surfaces	<a href="https://youtu.be/nkiRi6OEJfk">https://youtu.be/nkiRi6OEJfk</a>
		6	Potential due to system of charges	<a href="https://youtu.be/Kucm7-2mmRs">https://youtu.be/Kucm7-2mmRs</a>
		7	Dielectric polarization	<a href="https://youtu.be/KBj1qiYO2o">https://youtu.be/KBj1qiYO2o</a>
		8	Dielectric polarization	<a href="https://youtu.be/2KTGdX95iZo">https://youtu.be/2KTGdX95iZo</a>
		9	Effect of dielectric on capacity	<a href="https://youtu.be/MuP4GN4Z9o">https://youtu.be/MuP4GN4Z9o</a>
		10	Charging of capacitor	<a href="https://youtu.be/IvFV7Jxa2I">https://youtu.be/IvFV7Jxa2I</a>
		11	Combination of capacitor	<a href="https://youtu.be/P_hCviKdG4I">https://youtu.be/P_hCviKdG4I</a>
		12	Van de Graaff Generator	<a href="https://youtu.be/FuctUAzuVml">https://youtu.be/FuctUAzuVml</a>
		13	Van de Graaff Generator	<a href="https://youtu.be/rpvHEMwaNDM">https://youtu.be/rpvHEMwaNDM</a>
		14	Electrostatic shielding	<a href="https://youtu.be/4ezXV5lko-E">https://youtu.be/4ezXV5lko-E</a>
3	Current Electricity	1	Electric current	<a href="https://faraday.physics.utoronto.ca/1YearLab/Intros/DCI/Flash/WaterAnalogy.html">https://faraday.physics.utoronto.ca/1YearLab/Intros/DCI/Flash/WaterAnalogy.html</a> <a href="https://www.khanacademy.org/science/in-in-class-12th-physics-india/in-in-current-electricity/in-in-electric-current-and-voltage/v/ee-current">https://www.khanacademy.org/science/in-in-class-12th-physics-india/in-in-current-electricity/in-in-electric-current-and-voltage/v/ee-current</a> <a href="https://youtu.be/KeEO7kARIK8">https://youtu.be/KeEO7kARIK8</a> <a href="https://www.youtube.com/watch?v=FOOz5a0jIA4&amp;index=25&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=FOOz5a0jIA4&amp;index=25&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
		2	Drift Velocity	<a href="http://www.schoolphysics.co.uk/animations/Electricity%20-%20magnetism%20animations/Electric_current/index.html">http://www.schoolphysics.co.uk/animations/Electricity%20-%20magnetism%20animations/Electric_current/index.html</a> <a href="http://phvs23p.sl.psu.edu/phys_anim/EM/random_walk.avi">http://phvs23p.sl.psu.edu/phys_anim/EM/random_walk.avi</a>
		3	Ohm's Law	<a href="http://www.falstad.com/circuit/e-ohms.html">http://www.falstad.com/circuit/e-ohms.html</a> <a href="https://phet.colorado.edu/en/simulation/legacv/battery-resistor-circuit">https://phet.colorado.edu/en/simulation/legacv/battery-resistor-circuit</a> <a href="http://www.falstad.com/circuit/e-resistors.html">http://www.falstad.com/circuit/e-resistors.html</a> <a href="https://phet.colorado.edu/en/simulation/ohms-law">https://phet.colorado.edu/en/simulation/ohms-law</a> <a href="http://www.schoolphysics.co.uk/animations/Electricity%20-%20magnetism%20animations/Ohms_law/index.html">http://www.schoolphysics.co.uk/animations/Electricity%20-%20magnetism%20animations/Ohms_law/index.html</a> <a href="https://www.youtube.com/watch?v=aUvOTFFL_o8&amp;index=26&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=aUvOTFFL_o8&amp;index=26&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a> <a href="http://www.physics-chemistry-interactive-flash-animation.com/electricity_electromagnetism_interactive/resistance_ohm_law_2.htm">http://www.physics-chemistry-interactive-flash-animation.com/electricity_electromagnetism_interactive/resistance_ohm_law_2.htm</a> <a href="http://amrita.olabs.edu.in/?sub=1&amp;brch=6&amp;sim=22&amp;cnt=1">http://amrita.olabs.edu.in/?sub=1&amp;brch=6&amp;sim=22&amp;cnt=1</a> <a href="http://amrita.olabs.edu.in/?sub=1&amp;brch=4&amp;sim=99&amp;cnt=1">http://amrita.olabs.edu.in/?sub=1&amp;brch=4&amp;sim=99&amp;cnt=1</a> <a href="http://cdac.olabs.edu.in/?sub=74&amp;brch=9&amp;sim=75&amp;cnt=1">http://cdac.olabs.edu.in/?sub=74&amp;brch=9&amp;sim=75&amp;cnt=1</a> <a href="https://phet.colorado.edu/en/simulation/legacv/circuit-construction-kit-de">https://phet.colorado.edu/en/simulation/legacv/circuit-construction-kit-de</a>
		4	How does a battery work?	<a href="https://phet.colorado.edu/en/simulation/legacv/battery-voltage">https://phet.colorado.edu/en/simulation/legacv/battery-voltage</a> <a href="http://www.vascak.cz/data/android/physicsatschool/template.php?s=elkap_akumulator&amp;l=en&amp;zoom=0">http://www.vascak.cz/data/android/physicsatschool/template.php?s=elkap_akumulator&amp;l=en&amp;zoom=0</a>
		5	Resistance	<a href="https://phet.colorado.edu/en/simulation/ohms-law">https://phet.colorado.edu/en/simulation/ohms-law</a> <a href="http://www.vascak.cz/data/android/physicsatschool/template.php?s=ele_odpor&amp;l=en&amp;zoom=0">http://www.vascak.cz/data/android/physicsatschool/template.php?s=ele_odpor&amp;l=en&amp;zoom=0</a>

## II PUC PHYSICS

SLNO	CHAPTERS	SUB TOPIC	RELATED LINKS
			<a href="https://phet.colorado.edu/en/simulation/resistance-in-a-wire">https://phet.colorado.edu/en/simulation/resistance-in-a-wire</a>
			<a href="https://www.youtube.com/watch?v=oWtaCBe8KTE&amp;index=33&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=oWtaCBe8KTE&amp;index=33&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
	6	Electric energy and power	<a href="https://www.youtube.com/watch?v=F6WbtX19oIs&amp;index=28&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=F6WbtX19oIs&amp;index=28&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
	7	Kirchhoff's laws	<a href="http://www.vascek.cz/data/android/physicsatschool/template.php?s=ele_kirchhoff&amp;l=en&amp;zoom=0">http://www.vascek.cz/data/android/physicsatschool/template.php?s=ele_kirchhoff&amp;l=en&amp;zoom=0</a>
			<a href="https://www.khanacademy.org/science/in-in-class-12th-physics-india/in-in-current-electricity/in-in-circuit-networks/v/circuit-terminology">https://www.khanacademy.org/science/in-in-class-12th-physics-india/in-in-current-electricity/in-in-circuit-networks/v/circuit-terminology</a>
			<a href="https://www.youtube.com/watch?v=SIH3c7ZdnWs&amp;index=31&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=SIH3c7ZdnWs&amp;index=31&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
	8	Circuits	<a href="https://www.khanacademy.org/science/in-in-class-12th-physics-india/in-in-current-electricity/in-in-circuits-resistance/v/circuits-part-1">https://www.khanacademy.org/science/in-in-class-12th-physics-india/in-in-current-electricity/in-in-circuits-resistance/v/circuits-part-1</a>
	9	Potentiometer	<a href="http://amrita.olabs.edu.in/?sub=1&amp;brch=6&amp;sim=147&amp;cnt=1">http://amrita.olabs.edu.in/?sub=1&amp;brch=6&amp;sim=147&amp;cnt=1</a>
			<a href="http://amrita.olabs.edu.in/?sub=1&amp;brch=6&amp;sim=231&amp;cnt=1">http://amrita.olabs.edu.in/?sub=1&amp;brch=6&amp;sim=231&amp;cnt=1</a>
	10	Combination of resistances	<a href="http://www.walter-fendt.de/ph6en/combinationresistors_en.htm">http://www.walter-fendt.de/ph6en/combinationresistors_en.htm</a>
			<a href="http://amrita.olabs.edu.in/?sub=1&amp;brch=4&amp;sim=40&amp;cnt=1">http://amrita.olabs.edu.in/?sub=1&amp;brch=4&amp;sim=40&amp;cnt=1</a>
			<a href="http://amrita.olabs.edu.in/?sub=1&amp;brch=4&amp;sim=41&amp;cnt=1">http://amrita.olabs.edu.in/?sub=1&amp;brch=4&amp;sim=41&amp;cnt=1</a>
			<a href="https://www.youtube.com/watch?v=q1ksff6luPO&amp;index=29&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=q1ksff6luPO&amp;index=29&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
	11	Meter-bridge	<a href="https://www.youtube.com/watch?v=GC7niougJYc&amp;index=30&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=GC7niougJYc&amp;index=30&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
			<a href="http://amrita.olabs.edu.in/?sub=1&amp;brch=6&amp;sim=146&amp;cnt=1">http://amrita.olabs.edu.in/?sub=1&amp;brch=6&amp;sim=146&amp;cnt=1</a>
			<a href="http://amrita.olabs.edu.in/?sub=1&amp;brch=6&amp;sim=150&amp;cnt=1">http://amrita.olabs.edu.in/?sub=1&amp;brch=6&amp;sim=150&amp;cnt=1</a>
			<a href="https://www.youtube.com/watch?v=Rwu_UzuCHqc&amp;index=32&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=Rwu_UzuCHqc&amp;index=32&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
	12	Potentiometer	<a href="https://www.youtube.com/watch?v=jhkct_S8YPA&amp;index=34&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=jhkct_S8YPA&amp;index=34&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
	13	Effect of temperature on resistance	<a href="http://techtv.mit.edu/collections/physicsdemos/videos/1689-temperature-effect-on-resistance">http://techtv.mit.edu/collections/physicsdemos/videos/1689-temperature-effect-on-resistance</a>
	14	Current electricity	<a href="http://nroer.gov.in/55ab34ff81fcb4fd806025/page/57d2af0616b51c2fd1144c2">http://nroer.gov.in/55ab34ff81fcb4fd806025/page/57d2af0616b51c2fd1144c2</a>
	15	DC vs AC	<a href="http://phys23p.sl.psu.edu/phys_anim/EM/AC_DC.avi">http://phys23p.sl.psu.edu/phys_anim/EM/AC_DC.avi</a>
			<a href="https://youtu.be/pZj79r2unC8">https://youtu.be/pZj79r2unC8</a>
4	Moving Charges and Magnetism	1	Cross-product of two vectors
			V
			<a href="http://phys23p.sl.psu.edu/phys_anim/vectors/vector_cross.avi">http://phys23p.sl.psu.edu/phys_anim/vectors/vector_cross.avi</a>
			<a href="https://www.khanacademy.org/science/in-in-class-12th-physics-india/moving-charges-and-magnetism/in-in-cross-product-prerequisite/v/cross-product-1">https://www.khanacademy.org/science/in-in-class-12th-physics-india/moving-charges-and-magnetism/in-in-cross-product-prerequisite/v/cross-product-1</a>
			<a href="https://en.m.wikipedia.org/wiki/File:Cross_product.gif">https://en.m.wikipedia.org/wiki/File:Cross_product.gif</a>
		2	Force on a charge moving in a magnetic field
			<a href="https://www.khanacademy.org/science/in-in-class-12th-physics-india/moving-charges-and-magnetism/in-in-magnets-and-magnetic-force/v/introduction-to-magnetism">https://www.khanacademy.org/science/in-in-class-12th-physics-india/moving-charges-and-magnetism/in-in-magnets-and-magnetic-force/v/introduction-to-magnetism</a>
			<a href="https://www.khanacademy.org/science/in-in-class-12th-physics-india/moving-charges-and-magnetism/modal/v/magnetism-2">https://www.khanacademy.org/science/in-in-class-12th-physics-india/moving-charges-and-magnetism/modal/v/magnetism-2</a>
			<a href="https://www.khanacademy.org/science/in-in-class-12th-physics-india/moving-charges-and-magnetism/modal/v/magnetism-3">https://www.khanacademy.org/science/in-in-class-12th-physics-india/moving-charges-and-magnetism/modal/v/magnetism-3</a>
			<a href="https://youtu.be/8li1Vp8yLal">https://youtu.be/8li1Vp8yLal</a>
			<a href="https://www.khanacademy.org/science/in-in-class-12th-physics-india/moving-charges-and-magnetism/modal/v/magnetism-4">https://www.khanacademy.org/science/in-in-class-12th-physics-india/moving-charges-and-magnetism/modal/v/magnetism-4</a>
		3	Motion of a charged particle moving in a magnetic field
			a. When the angle between velocity and magnetic field is 90°
			<a href="http://techtv.mit.edu/collections/physicsdemos/videos/601-mit-physics-demo-magnetic-deflection-of-a-tv-image">http://techtv.mit.edu/collections/physicsdemos/videos/601-mit-physics-demo-magnetic-deflection-of-a-tv-image</a>
			<a href="http://phys23p.sl.psu.edu/phys_anim/EM/charge_in_a_magnetic_field_2013_v2.avi">http://phys23p.sl.psu.edu/phys_anim/EM/charge_in_a_magnetic_field_2013_v2.avi</a>
			<a href="http://phys23p.sl.psu.edu/phys_anim/EM/charge_in_a_magnetic_field_2013_v2.avi">http://phys23p.sl.psu.edu/phys_anim/EM/charge_in_a_magnetic_field_2013_v2.avi</a>
			<a href="http://phys23p.sl.psu.edu/phys_anim/EM/charge_in_bfield_helical2.avi">http://phys23p.sl.psu.edu/phys_anim/EM/charge_in_bfield_helical2.avi</a>
			<a href="http://phys23p.sl.psu.edu/phys_anim/EM/charge_in_bfield_helical.avi">http://phys23p.sl.psu.edu/phys_anim/EM/charge_in_bfield_helical.avi</a>
			<a href="https://www.youtube.com/watch?v=E_Gkrq-TySA&amp;index=37&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=E_Gkrq-TySA&amp;index=37&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
		4	Force on a current carrying conductor placed in a magnetic field
			<a href="http://cdac.olabs.edu.in/?sub=74&amp;brch=9&amp;sim=241&amp;cnt=1">http://cdac.olabs.edu.in/?sub=74&amp;brch=9&amp;sim=241&amp;cnt=1</a>
		5	Magnetic field at a point on the axis of the circular loop
			<a href="http://phys23p.sl.psu.edu/phys_anim/EM/b_loop_p1.avi">http://phys23p.sl.psu.edu/phys_anim/EM/b_loop_p1.avi</a>
			<a href="http://phys23p.sl.psu.edu/phys_anim/EM/b_loop_p2.avi">http://phys23p.sl.psu.edu/phys_anim/EM/b_loop_p2.avi</a>
			<a href="http://phys23p.sl.psu.edu/phys_anim/EM/bfieldlines_1loop.avi">http://phys23p.sl.psu.edu/phys_anim/EM/bfieldlines_1loop.avi</a>
			<a href="https://www.youtube.com/watch?v=REoBhg2G474&amp;index=36&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=REoBhg2G474&amp;index=36&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
			<a href="http://phys23p.sl.psu.edu/phys_anim/EM/b_hand_loop.avi">http://phys23p.sl.psu.edu/phys_anim/EM/b_hand_loop.avi</a>
		6	Lorentz force
			<a href="https://www.youtube.com/watch?v=msDWtkVad7c&amp;index=38&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=msDWtkVad7c&amp;index=38&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
			<a href="https://youtu.be/nRDVmsrn_2A">https://youtu.be/nRDVmsrn_2A</a>
		7	Biot - Savart's law
			<a href="https://www.youtube.com/watch?v=TP5t84nkVCo&amp;index=39&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=TP5t84nkVCo&amp;index=39&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
			<a href="https://youtu.be/X4dXXnUMHbQ">https://youtu.be/X4dXXnUMHbQ</a>
		8	Force between two parallel currents
			a. When the currents are in same direction (Attraction)
			<a href="http://techtv.mit.edu/collections/physicsdemos/videos/813-mit-physics-demo-forces-on-a-current-carrying-wire">http://techtv.mit.edu/collections/physicsdemos/videos/813-mit-physics-demo-forces-on-a-current-carrying-wire</a>
			<a href="https://www.khanacademy.org/science/in-in-class-12th-physics-india/moving-charges-and-magnetism/modal/v/magnetism-7">https://www.khanacademy.org/science/in-in-class-12th-physics-india/moving-charges-and-magnetism/modal/v/magnetism-7</a>
			<a href="https://youtu.be/xZut1KoUWbs">https://youtu.be/xZut1KoUWbs</a>
			<a href="https://www.khanacademy.org/science/in-in-class-12th-physics-india/moving-charges-and-magnetism/modal/v/magnetism-8">https://www.khanacademy.org/science/in-in-class-12th-physics-india/moving-charges-and-magnetism/modal/v/magnetism-8</a>
			<a href="https://www.youtube.com/watch?v=ip09t8firiy&amp;index=43&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=ip09t8firiy&amp;index=43&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
		9	Ampere's law
			<a href="https://www.youtube.com/watch?v=O6TXouliUw4&amp;index=41&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=O6TXouliUw4&amp;index=41&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
		10	Magnetic field inside a solenoid
			<a href="http://cdac.olabs.edu.in/?sub=74&amp;brch=9&amp;sim=91&amp;cnt=1">http://cdac.olabs.edu.in/?sub=74&amp;brch=9&amp;sim=91&amp;cnt=1</a>
			<a href="http://www.bugman123.com/Physics/Solenoid.mtv">http://www.bugman123.com/Physics/Solenoid.mtv</a>
		11	Magnetic field inside a toroid
			<a href="http://phys23p.sl.psu.edu/phys_anim/EM/toroidal_solenoid_amperes_law2.avi">http://phys23p.sl.psu.edu/phys_anim/EM/toroidal_solenoid_amperes_law2.avi</a>
		12	Determination of direction of magnetic field due to current
			<a href="http://cdac.olabs.edu.in/?sub=74&amp;brch=9&amp;sim=90&amp;cnt=1">http://cdac.olabs.edu.in/?sub=74&amp;brch=9&amp;sim=90&amp;cnt=1</a>
			<a href="http://phys23p.sl.psu.edu/phys_anim/EM/b_line_p1.avi">http://phys23p.sl.psu.edu/phys_anim/EM/b_line_p1.avi</a>
			<a href="http://phys23p.sl.psu.edu/phys_anim/EM/b_line_p2.avi">http://phys23p.sl.psu.edu/phys_anim/EM/b_line_p2.avi</a>
			<a href="https://www.khanacademy.org/science/in-in-class-12th-physics-india/moving-charges-and-magnetism/modal/v/magnetism-6-magnetic-field-due-to-current">https://www.khanacademy.org/science/in-in-class-12th-physics-india/moving-charges-and-magnetism/modal/v/magnetism-6-magnetic-field-due-to-current</a>
		13	Direction of magnetic field due to a straight wire
			<a href="http://phys23p.sl.psu.edu/phys_anim/EM/b_hand_longwire.avi">http://phys23p.sl.psu.edu/phys_anim/EM/b_hand_longwire.avi</a>
		14	Torque on a current loop
			<a href="http://phys23p.sl.psu.edu/phys_anim/EM/mag_torque_loop.avi">http://phys23p.sl.psu.edu/phys_anim/EM/mag_torque_loop.avi</a>
			<a href="http://phys23p.sl.psu.edu/phys_anim/EM/DC_motorNHD.avi">http://phys23p.sl.psu.edu/phys_anim/EM/DC_motorNHD.avi</a>
			<a href="http://phys23p.sl.psu.edu/phys_anim/EM/torque_on_magnetic_moment.mp4">http://phys23p.sl.psu.edu/phys_anim/EM/torque_on_magnetic_moment.mp4</a>
		15	Moving coil galvanometer
			<a href="https://www.youtube.com/watch?v=oaA1G5NOUd8&amp;t=146s">https://www.youtube.com/watch?v=oaA1G5NOUd8&amp;t=146s</a>
			<a href="https://youtu.be/VucsoEhBoNA">https://youtu.be/VucsoEhBoNA</a>
			<a href="http://techtv.mit.edu/collections/physicsdemos/videos/812-mit-physics-demo-galvanometer-principle">http://techtv.mit.edu/collections/physicsdemos/videos/812-mit-physics-demo-galvanometer-principle</a>

## II PUC PHYSICS

SLNO	CHAPTERS	SUB TOPIC	RELATED LINKS
		<a href="https://youtu.be/Cx4_7lIjoBA">https://youtu.be/Cx4_7lIjoBA</a>	<a href="https://www.youtube.com/watch?v=eMgpDgHJVvY&amp;index=46&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl">https://www.youtube.com/watch?v=eMgpDgHJVvY&amp;index=46&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl</a>
		16 Conversion of galvanometer into ammeter	<a href="http://amrita.olabs.edu.in/?sub=1&amp;brch=6&amp;sim=26&amp;cnt=1">http://amrita.olabs.edu.in/?sub=1&amp;brch=6&amp;sim=26&amp;cnt=1</a>
		17 Line integral of a magnetic field	<a href="https://en.m.wikipedia.org/wiki/User:LucasVB/Gallery#/media/File%3ALine_integral_of_vector_field.gif">https://en.m.wikipedia.org/wiki/User:LucasVB/Gallery#/media/File%3ALine_integral_of_vector_field.gif</a>
5	Magnetism and matter	1 Magnesia regional unit	<a href="https://en.wikipedia.org/wiki/Magnesia_(regional_unit)">https://en.wikipedia.org/wiki/Magnesia_(regional_unit)</a>
		2 Lodestone	<a href="https://en.wikipedia.org/wiki/Lodestone">https://en.wikipedia.org/wiki/Lodestone</a>
		3 About magnet (Basic properties)	<a href="https://www.youtube.com/watch?v=oZufndp7SbY">https://www.youtube.com/watch?v=oZufndp7SbY</a>
			<a href="https://www.youtube.com/watch?v=i8XNHIV6Qxg">https://www.youtube.com/watch?v=i8XNHIV6Qxg</a>
		4 Faraday's Electromagnetic lab	<a href="https://phet.colorado.edu/en/simulation/faraday">https://phet.colorado.edu/en/simulation/faraday</a>
			<a href="https://youtu.be/EYYNRubHIno">https://youtu.be/EYYNRubHIno</a>
		5 Bar magnet equivalent to solenoid	<a href="https://www.youtube.com/watch?v=AAH2rMGwOo">https://www.youtube.com/watch?v=AAH2rMGwOo</a>
		6 Torque on bar magnetic in magnetic field	<a href="https://www.youtube.com/watch?v=cXV8mwYXKUc">https://www.youtube.com/watch?v=cXV8mwYXKUc</a>
		7 Gauss law for magnetism	<a href="https://www.youtube.com/watch?v=cF3vwIPwOHk">https://www.youtube.com/watch?v=cF3vwIPwOHk</a>
		8 Carl Friedrich Gauss	<a href="https://en.wikipedia.org/wiki/Carl_Friedrich_Gauss">https://en.wikipedia.org/wiki/Carl_Friedrich_Gauss</a>
		9 The Earth's Magnetism	<a href="https://www.youtube.com/watch?v=Aq341z4it1I">https://www.youtube.com/watch?v=Aq341z4it1I</a>
		10 Applications of Supper conductors	<a href="https://www.youtube.com/watch?v=2xOAb68arvo">https://www.youtube.com/watch?v=2xOAb68arvo</a>
6	Electromagnetic Induction	1 Faraday's Experiments:	<a href="https://phet.colorado.edu/en/simulation/legacy/faraday">https://phet.colorado.edu/en/simulation/legacy/faraday</a>
			<a href="https://phet.colorado.edu/en/simulation/faradays-law">https://phet.colorado.edu/en/simulation/faradays-law</a>
		2 Mutual Inductance	<a href="https://www.youtube.com/watch?v=tJOTEpVYNok">https://www.youtube.com/watch?v=tJOTEpVYNok</a>
		3 AC generator:	<a href="https://www.youtube.com/watch?v=gQyamjPrw-U">https://www.youtube.com/watch?v=gQyamjPrw-U</a>
			<a href="https://phet.colorado.edu/en/simulation/legacy/generator">https://phet.colorado.edu/en/simulation/legacy/generator</a>
			<a href="https://youtu.be/Q4FIUP-kJe8">https://youtu.be/Q4FIUP-kJe8</a>
7	Alternating current	1 Difference between AC and DC	<a href="https://www.youtube.com/watch?v=JzjMuIH0Beg">https://www.youtube.com/watch?v=JzjMuIH0Beg</a>
		2 AC through a resistor	<a href="https://www.youtube.com/watch?v=dnOnikMiris&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl&amp;index=64">https://www.youtube.com/watch?v=dnOnikMiris&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl&amp;index=64</a>
		3 RMS, Peak values, Phasors	<a href="https://www.youtube.com/watch?v=oKdV5XrrXnI&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl&amp;index=65">https://www.youtube.com/watch?v=oKdV5XrrXnI&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl&amp;index=65</a>
		4 Series LCR Resonance	<a href="http://techtv.mit.edu/collections/physicsdemos/videos/771-mit-physics-demo-resonant-rlc-circuit">http://techtv.mit.edu/collections/physicsdemos/videos/771-mit-physics-demo-resonant-rlc-circuit</a>
		5 AC through a capacitor	<a href="https://www.youtube.com/watch?v=WczJ_vCnmGo&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl&amp;index=67">https://www.youtube.com/watch?v=WczJ_vCnmGo&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl&amp;index=67</a>
		6 AC through an inductor	<a href="https://www.youtube.com/watch?v=6EomvdhOTLw&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl&amp;index=66">https://www.youtube.com/watch?v=6EomvdhOTLw&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl&amp;index=66</a>
		7 Series LCR circuit	<a href="https://www.youtube.com/watch?v=WczJ_vCnmGo&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl&amp;index=67">https://www.youtube.com/watch?v=WczJ_vCnmGo&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl&amp;index=67</a>
		8 Transformers	<a href="https://www.youtube.com/watch?v=U3CubKnkO4c">https://www.youtube.com/watch?v=U3CubKnkO4c</a>
8	Electromagnetic waves	1 Displacement current	<a href="https://www.youtube.com/watch?v=D23FdTDJ6A&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl&amp;index=74">https://www.youtube.com/watch?v=D23FdTDJ6A&amp;list=PLNz32RYOjBepdhGCSA5OoVPha83vKJePl&amp;index=74</a>
			<a href="https://www.youtube.com/watch?v=oXmcCDB6SKY">https://www.youtube.com/watch?v=oXmcCDB6SKY</a>
			<a href="https://www.youtube.com/watch?v=RHAAYxLXUeU">https://www.youtube.com/watch?v=RHAAYxLXUeU</a>
		2 Electromagnetic waves	<a href="https://www.youtube.com/watch?v=fZnYE3kvhhA">https://www.youtube.com/watch?v=fZnYE3kvhhA</a>
			<a href="https://www.youtube.com/watch?v=XFBhmG6tIU">https://www.youtube.com/watch?v=XFBhmG6tIU</a>
		3 Electromagnetic spectrum	<a href="https://www.youtube.com/watch?v=1bpmI3wdqW8">https://www.youtube.com/watch?v=1bpmI3wdqW8</a>
			<a href="https://youtu.be/FVpPU4NLjho">https://youtu.be/FVpPU4NLjho</a>
9	Ray optics and optical instruments	1 Refraction and reflection of light ray	<a href="https://www.youtube.com/watch?v=O84-DIvJ5wQ">https://www.youtube.com/watch?v=O84-DIvJ5wQ</a>
		2 Focusing, Imaging and paraxial approximation	<a href="https://www.youtube.com/watch?v=X6cea7AhBe">https://www.youtube.com/watch?v=X6cea7AhBe</a>
		3 Sign conventions	<a href="https://www.youtube.com/watch?v=gAL5fCEBfac">https://www.youtube.com/watch?v=gAL5fCEBfac</a>
		4 Rainbows and Blue Skies	<a href="https://www.youtube.com/watch?v=6OVbE_1U2sA">https://www.youtube.com/watch?v=6OVbE_1U2sA</a>
		5 The Hidden Beauty of Rainbows	<a href="https://www.youtube.com/watch?v=iKUSWJWMSk4">https://www.youtube.com/watch?v=iKUSWJWMSk4</a>
		6 Snell's Law, Refraction and Total Reflection	<a href="https://www.youtube.com/watch?v=8ISMnhS5eWk">https://www.youtube.com/watch?v=8ISMnhS5eWk</a>
			<a href="https://youtu.be/4heHz65oVsl">https://youtu.be/4heHz65oVsl</a>
		7 Snell's Law, Index of Refraction, Huygen's Principle	<a href="https://www.youtube.com/watch?v=irpiwXpa4xU">https://www.youtube.com/watch?v=irpiwXpa4xU</a>
		8 Refraction Through a Glass Prism	<a href="https://www.youtube.com/watch?v=cOhO88edWxU">https://www.youtube.com/watch?v=cOhO88edWxU</a>
			<a href="https://www.youtube.com/watch?v=YavkGZFR4">https://www.youtube.com/watch?v=YavkGZFR4</a>
		9 Reflection on the plane surface:	<a href="https://www.youtube.com/watch?v=dwxaq4c9K6k">https://www.youtube.com/watch?v=dwxaq4c9K6k</a>
		10 Reflection on Curved mirrors:	<a href="https://www.youtube.com/watch?v=7iKinLJs49Y">https://www.youtube.com/watch?v=7iKinLJs49Y</a>
			<a href="https://youtu.be/TssspOR4TIs">https://youtu.be/TssspOR4TIs</a>
			<a href="https://youtu.be/cO4q2W3VSfc">https://youtu.be/cO4q2W3VSfc</a>
			<a href="https://youtu.be/cO4q2W3VSfc">https://youtu.be/cO4q2W3VSfc</a>
		11 Refraction at convex lens:	<a href="https://www.youtube.com/watch?v=c6mLLaQLdvg">https://www.youtube.com/watch?v=c6mLLaQLdvg</a>
			<a href="https://youtu.be/LzIIf3pp-8">https://youtu.be/LzIIf3pp-8</a>
			<a href="https://youtu.be/ELoJ3Kmf6wXl">https://youtu.be/ELoJ3Kmf6wXl</a>
			<a href="https://www.youtube.com/watch?v=R-uMcnGNSk">https://www.youtube.com/watch?v=R-uMcnGNSk</a>
			<a href="https://phet.colorado.edu/sims/html/bending-light/latest/bending-light_en.html">https://phet.colorado.edu/sims/html/bending-light/latest/bending-light_en.html</a>
		12 Refraction at concave lens:	<a href="https://www.youtube.com/watch?v=c2GFG6cvPew">https://www.youtube.com/watch?v=c2GFG6cvPew</a>
			<a href="https://youtu.be/4zuB_dSJm1Y">https://youtu.be/4zuB_dSJm1Y</a>
			<a href="https://www.youtube.com/watch?v=XHLDuNqNp1I">https://www.youtube.com/watch?v=XHLDuNqNp1I</a>
			<a href="https://www.youtube.com/watch?v=o3kei-wNxeY">https://www.youtube.com/watch?v=o3kei-wNxeY</a>
		13 Mirror formula and magnification:	<a href="https://www.youtube.com/watch?v=cO4q2W3VSfc">https://www.youtube.com/watch?v=cO4q2W3VSfc</a>

## II PUC PHYSICS

SLNO	CHAPTERS	SUB TOPIC	RELATED LINKS
			<a href="https://youtu.be/hvjDHxvMSCY">https://youtu.be/hvjDHxvMSCY</a>
			<a href="https://youtu.be/KkNnivOSpTw">https://youtu.be/KkNnivOSpTw</a>
		14 Laws of refraction and phenomenon in nature	<a href="https://www.youtube.com/watch?v=kc2o73FyN3I">https://www.youtube.com/watch?v=kc2o73FyN3I</a>
		15 Total internal reflection and critical angle:	<a href="https://www.youtube.com/watch?v=mtVbb_MVNDg">https://www.youtube.com/watch?v=mtVbb_MVNDg</a>
			<a href="https://www.youtube.com/watch?v=T-iy29oEmSI">https://www.youtube.com/watch?v=T-iy29oEmSI</a>
		16 Optical fibers:	<a href="https://www.youtube.com/watch?v=Lic3eCS_bKo">https://www.youtube.com/watch?v=Lic3eCS_bKo</a>
10	Wave Optics	1 Huygen's Principle	<a href="https://www.youtube.com/watch?v=gliLaaeZHwg">https://www.youtube.com/watch?v=gliLaaeZHwg</a>
			<a href="https://www.youtube.com/watch?v=5g3ChMJBITc">https://www.youtube.com/watch?v=5g3ChMJBITc</a>
		2 Interference	<a href="https://www.youtube.com/watch?v=bluroMemUQA">https://www.youtube.com/watch?v=bluroMemUQA</a>
			<a href="https://www.youtube.com/watch?v=oTjTXS4opqs">https://www.youtube.com/watch?v=oTjTXS4opqs</a>
			<a href="https://youtu.be/oYFEWoxuBI">https://youtu.be/oYFEWoxuBI</a>
		3 Young's double slit experiment	<a href="https://www.khanacademy.org/science/physics/light-waves/interference-of-light-waves/v/yongs-double-split-part-1">https://www.khanacademy.org/science/physics/light-waves/interference-of-light-waves/v/yongs-double-split-part-1</a>
			<a href="https://www.youtube.com/watch?v=oUkkKM1IkKg">https://www.youtube.com/watch?v=oUkkKM1IkKg</a>
			<a href="https://youtu.be/eW5YGGJuWtQ">https://youtu.be/eW5YGGJuWtQ</a>
		4 Diffraction	<a href="https://www.youtube.com/watch?v=mNOW5OSHMA">https://www.youtube.com/watch?v=mNOW5OSHMA</a>
			<a href="https://www.youtube.com/watch?v=GafKdVFM28">https://www.youtube.com/watch?v=GafKdVFM28</a>
			<a href="https://www.youtube.com/watch?v=oD8cPrEAGvc">https://www.youtube.com/watch?v=oD8cPrEAGvc</a>
			<a href="https://youtu.be/56IXZafkFIA">https://youtu.be/56IXZafkFIA</a>
			<a href="https://youtu.be/iDr6ZMGgm8E">https://youtu.be/iDr6ZMGgm8E</a>
		5 Polarization	<a href="https://www.youtube.com/watch?v=FfS-aoIPyM">https://www.youtube.com/watch?v=FfS-aoIPyM</a>
			<a href="https://youtu.be/X12PYCegm0k">https://youtu.be/X12PYCegm0k</a>
			<a href="https://www.youtube.com/watch?v=6_C8KyU67RU">https://www.youtube.com/watch?v=6_C8KyU67RU</a>
			<a href="https://www.youtube.com/watch?v=11w32FwMvbl">https://www.youtube.com/watch?v=11w32FwMvbl</a>
			<a href="https://www.youtube.com/watch?v=6_C8KyU67RU">https://www.youtube.com/watch?v=6_C8KyU67RU</a>
		6 Polarization by reflection	<a href="https://www.youtube.com/watch?v=xh9QCxwmwls">https://www.youtube.com/watch?v=xh9QCxwmwls</a>
			<a href="https://www.youtube.com/watch?v=ZlvAXaG97E">https://www.youtube.com/watch?v=ZlvAXaG97E</a>
			<a href="https://www.youtube.com/watch?v=xK9FGCdb8&amp;list=PLNz32RYOjBendhGCSA5OoVPha83vKJePl&amp;index=100">https://www.youtube.com/watch?v=xK9FGCdb8&amp;list=PLNz32RYOjBendhGCSA5OoVPha83vKJePl&amp;index=100</a>
			<a href="https://www.youtube.com/watch?v=5g3ChMJBITc">https://www.youtube.com/watch?v=5g3ChMJBITc</a>
			<a href="https://www.youtube.com/watch?v=gliLaaeZHwg">https://www.youtube.com/watch?v=gliLaaeZHwg</a>
		8 Laws of reflection and refraction on wave nature	<a href="https://www.youtube.com/watch?v=DnNocS7_5a4">https://www.youtube.com/watch?v=DnNocS7_5a4</a>
		9 Young Double Slit Experiment	<a href="https://www.youtube.com/watch?v=J2YBoOZzxPw">https://www.youtube.com/watch?v=J2YBoOZzxPw</a>
		10 Interference and Diffraction	<a href="https://www.youtube.com/watch?v=oYFEWoxuBI">https://www.youtube.com/watch?v=oYFEWoxuBI</a>
11	Dual nature of radiation and matter	1 Electron emission and its types.	<a href="https://www.youtube.com/watch?v=zMwXvzhrzCc">https://www.youtube.com/watch?v=zMwXvzhrzCc</a>
			<a href="https://studv.com/academy/.../electron-transitions-spectral-lines.ht...">https://studv.com/academy/.../electron-transitions-spectral-lines.ht...</a>
		2 Photoelectric effect.	<a href="https://www.youtube.com/watch?v=v5h3h2E4z2Q">https://www.youtube.com/watch?v=v5h3h2E4z2Q</a>
			<a href="https://www.youtube.com/watch?v=Lx07AXEuBn8">https://www.youtube.com/watch?v=Lx07AXEuBn8</a>
		3 Photoelectric workfunction	<a href="https://www.youtube.com/watch?v=-LECEvusk8E">https://www.youtube.com/watch?v=-LECEvusk8E</a>
			<a href="https://www.youtube.com/watch?v=txq5PAuWD7U">https://www.youtube.com/watch?v=txq5PAuWD7U</a>
		4 Threshold wavelength and frequency.	<a href="https://www.youtube.com/watch?v=-kDKYPKxIU">https://www.youtube.com/watch?v=-kDKYPKxIU</a>
			<a href="https://www.youtube.com/watch?v=vVdO_Uomr8Y">https://www.youtube.com/watch?v=vVdO_Uomr8Y</a>
		6 Hertz's observation about photoelectric effect	<a href="https://www.youtube.com/watch?v=6vtMxm-u50c">https://www.youtube.com/watch?v=6vtMxm-u50c</a>
			<a href="https://www.youtube.com/watch?v=RelkTheAxvg">https://www.youtube.com/watch?v=RelkTheAxvg</a>
		7 Lenards observations about photoelectric effect	<a href="https://www.youtube.com/watch?v=cNCDRoV6Fbg">https://www.youtube.com/watch?v=cNCDRoV6Fbg</a>
		8 Hallwatches observations about photoelectric effect	<a href="https://www.youtube.com/watch?v=p61LWH6wfc">https://www.youtube.com/watch?v=p61LWH6wfc</a>
		9 Experimental observations about photoelectric effect	<a href="https://www.youtube.com/watch?v=uMFVSNKHEOI">https://www.youtube.com/watch?v=uMFVSNKHEOI</a>
			<a href="https://www.youtube.com/watch?v=PZKeUocUhdM">https://www.youtube.com/watch?v=PZKeUocUhdM</a>
		10 Effect of stopping potential on photoelectric effect	<a href="https://www.youtube.com/watch?v=mWrMjavBOdo">https://www.youtube.com/watch?v=mWrMjavBOdo</a>
			<a href="https://www.youtube.com/watch?v=zBIwiHV8kAO">https://www.youtube.com/watch?v=zBIwiHV8kAO</a>
		11 Einstein's explanation about photoelectric effect	<a href="https://www.youtube.com/watch?v=bbp-CXBu7e4">https://www.youtube.com/watch?v=bbp-CXBu7e4</a>
			<a href="https://www.youtube.com/watch?v=NGbXuzk67OM">https://www.youtube.com/watch?v=NGbXuzk67OM</a>
		12 Photon/Quantum- Characteristics.	<a href="https://studv.com/academy/lesson/what-is-a-photon-definition-energy-wavelength.html">https://studv.com/academy/lesson/what-is-a-photon-definition-energy-wavelength.html</a>
		13 de-Broglie hypothesis.	<a href="https://studv.com/academy/lesson/the-de-broglie-hypothesis-definition-significance.html">https://studv.com/academy/lesson/the-de-broglie-hypothesis-definition-significance.html</a>
			<a href="https://www.youtube.com/watch?v=XCHHHddozG8">https://www.youtube.com/watch?v=XCHHHddozG8</a>
		14 Hisenberg's uncertainty principle.	<a href="https://www.youtube.com/watch?v=a8FTRzqMutA">https://www.youtube.com/watch?v=a8FTRzqMutA</a>
			<a href="https://www.youtube.com/watch?v=m8VQue1Nffv">https://www.youtube.com/watch?v=m8VQue1Nffv</a>
		15 Wave packet.	<a href="https://www.youtube.com/watch?v=XiqPdeY6rA">https://www.youtube.com/watch?v=XiqPdeY6rA</a>
			<a href="https://www.youtube.com/watch?v=CiEVm46LLUc">https://www.youtube.com/watch?v=CiEVm46LLUc</a>
		15 Davisson and Germer experiment.	<a href="https://www.youtube.com/watch?v=H07K27B_Uu8">https://www.youtube.com/watch?v=H07K27B_Uu8</a>

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SLNO	CHAPTERS	SUB TOPIC	RELATED LINKS
			<a href="https://www.youtube.com/watch?v=EwIsoB_ZsNU">https://www.youtube.com/watch?v=EwIsoB_ZsNU</a>
		17 Rest mass of photon is ZERO.	<a href="https://www.youtube.com/watch?v=88FqtR2GO4k">https://www.youtube.com/watch?v=88FqtR2GO4k</a> <a href="https://www.youtube.com/watch?v=eUio8u2foKo">https://www.youtube.com/watch?v=eUio8u2foKo</a>
		1 Geiger-Marsden experiment(ALPHA-Scattering)	<a href="https://www.youtube.com/watch?v=LTTVEvGoh98">https://www.youtube.com/watch?v=LTTVEvGoh98</a>
		2 Rutherford's alpha-scattering experiment.	<a href="https://www.youtube.com/watch?v=kHaR2rsFNhg">https://www.youtube.com/watch?v=kHaR2rsFNhg</a> <a href="https://www.youtube.com/watch?v=pDoAhP6Jfxo">https://www.youtube.com/watch?v=pDoAhP6Jfxo</a>
		3 Rutherford's model of an atom.	<a href="https://www.youtube.com/watch?v=4z46Bs3fRCY">https://www.youtube.com/watch?v=4z46Bs3fRCY</a> <a href="https://www.youtube.com/watch?v=Zd6_zVdMgJk">https://www.youtube.com/watch?v=Zd6_zVdMgJk</a>
		4 Expression for energy of an electron in hydro	<a href="https://www.youtube.com/watch?v=pKHbsHqFgo">https://www.youtube.com/watch?v=pKHbsHqFgo</a>
		5 Bohr's atommodel.	<a href="https://www.youtube.com/watch?v=nVW1zDPPZGM">https://www.youtube.com/watch?v=nVW1zDPPZGM</a> <a href="https://www.youtube.com/watch?v=oiU1nbM0Bg">https://www.youtube.com/watch?v=oiU1nbM0Bg</a>
		6 Expression for the radius of n th Bohr orbit of	<a href="https://www.youtube.com/watch?v=6SLMBU6-qaM">https://www.youtube.com/watch?v=6SLMBU6-qaM</a> <a href="https://www.youtube.com/watch?v=tdmIWzOe48A">https://www.youtube.com/watch?v=tdmIWzOe48A</a>
		7 Rydberg constant.	<a href="https://www.youtube.com/watch?v=FTS3zfayKyY">https://www.youtube.com/watch?v=FTS3zfayKyY</a>
		8 Line emission spectra of hydrogen atom.	<a href="https://www.youtube.com/watch?v=OI50GBUJ48s">https://www.youtube.com/watch?v=OI50GBUJ48s</a> <a href="https://www.youtube.com/watch?v=Kv-hRvEOiuA">https://www.youtube.com/watch?v=Kv-hRvEOiuA</a>
		9 Absorption spectra of hydrogen atom.	<a href="https://www.youtube.com/watch?v=AznXSVx2xXo">https://www.youtube.com/watch?v=AznXSVx2xXo</a>
		10 Energy level diagram.	<a href="https://www.youtube.com/watch?v=UJUTVqvbhow">https://www.youtube.com/watch?v=UJUTVqvbhow</a>
		11 Limitations of Bhor's theory.	<a href="https://www.youtube.com/watch?v=mJbgDRoPKrg">https://www.youtube.com/watch?v=mJbgDRoPKrg</a> <a href="https://www.youtube.com/watch?v=vwVb2dMmm_s">https://www.youtube.com/watch?v=vwVb2dMmm_s</a>
		12 de-Broglie explanation og Bohr's quantisation	<a href="https://www.youtube.com/watch?v=HGh14BnBaTo">https://www.youtube.com/watch?v=HGh14BnBaTo</a> <a href="https://video.search.yahoo.com/yhs/search;_ylt=Awr1cc6mZIVa3gAbWQPXqQt_7p=Standing+waves.&amp;fr=yhs-adk-adk_sbnt&amp;fr2=piv-w eb&amp;hspart=adk&amp;hsimp=yhs-adk_sbnt&amp;type=dm_appfocus5_ff#id=6&amp;vid=e7ebb">https://video.search.yahoo.com/yhs/search;_ylt=Awr1cc6mZIVa3gAbWQPXqQt_7p=Standing+waves.&amp;fr=yhs-adk-adk_sbnt&amp;fr2=piv-w eb&amp;hspart=adk&amp;hsimp=yhs-adk_sbnt&amp;type=dm_appfocus5_ff#id=6&amp;vid=e7ebb</a> <a href="https://video.search.yahoo.com/yhs/search;_ylt=Awr1cc6mZIVa3gAbWQPXqQt_7p=Standing+waves.&amp;fr=yhs-adk-adk_sbnt&amp;fr2=piv-w eb&amp;hspart=ad k&amp;hsimp=yhs-adk_sbnt&amp;type=dm_appfocus5_ff#id=7&amp;vid=d5308715d3720">https://video.search.yahoo.com/yhs/search;_ylt=Awr1cc6mZIVa3gAbWQPXqQt_7p=Standing+waves.&amp;fr=yhs-adk-adk_sbnt&amp;fr2=piv-w eb&amp;hspart=ad k&amp;hsimp=yhs-adk_sbnt&amp;type=dm_appfocus5_ff#id=7&amp;vid=d5308715d3720</a>
13	Nuclei	1 Structure of an atom.	<a href="https://www.youtube.com/watch?v=TBnJt-5LHeO">https://www.youtube.com/watch?v=TBnJt-5LHeO</a>
		2 Nuclear charge.	<a href="https://www.youtube.com/watch?v=J6ZpTo3Ovno">https://www.youtube.com/watch?v=J6ZpTo3Ovno</a>
		3 Nuclear density.	<a href="https://www.youtube.com/watch?v=2vOH5PEkiCo">https://www.youtube.com/watch?v=2vOH5PEkiCo</a>
		4 Atomic mass unit.	<a href="https://www.youtube.com/watch?v=CTO_RVN6WR4">https://www.youtube.com/watch?v=CTO_RVN6WR4</a>
		5 Mass defect.	<a href="https://www.khanacademy.org/science/physics/quantum-physics/in-in-nuclei/v/mass-defect-and-binding-energy">https://www.khanacademy.org/science/physics/quantum-physics/in-in-nuclei/v/mass-defect-and-binding-energy</a>
		6 Nuclearbinding energy.	<a href="https://www.khanacademy.org/science/physics/quantum-physics/in-in-nuclei/v/mass-defect-and-binding-energy">https://www.khanacademy.org/science/physics/quantum-physics/in-in-nuclei/v/mass-defect-and-binding-energy</a>
		7 Binding energy curve , features and significan	<a href="https://www.youtube.com/watch?v=oOdmrh7u-4E">https://www.youtube.com/watch?v=oOdmrh7u-4E</a>
		8 Nuclear fission.	<a href="https://www.youtube.com/watch?v=pY5HeZpNr8">https://www.youtube.com/watch?v=pY5HeZpNr8</a>
		9 Nuclear reactor.	<a href="https://www.youtube.com/watch?v=1U6Nzcv0Vws">https://www.youtube.com/watch?v=1U6Nzcv0Vws</a> <a href="https://youtu.be/LWGD74WMWtw">https://youtu.be/LWGD74WMWtw</a>
		10 Critical size of a fissionable material.	<a href="https://www.youtube.com/watch?v=gpCslJVfb48">https://www.youtube.com/watch?v=gpCslJVfb48</a>
		11 Nuclear fussion.	<a href="https://www.youtube.com/watch?v=Cb8NXqHiS4U">https://www.youtube.com/watch?v=Cb8NXqHiS4U</a> <a href="https://youtu.be/gGaDP7aHXCY">https://youtu.be/gGaDP7aHXCY</a>
		12 Stellar energy.	<a href="https://www.youtube.com/watch?v=6YIS2ZSGZil">https://www.youtube.com/watch?v=6YIS2ZSGZil</a> <a href="https://youtu.be/Cb8NXqHiS4U">https://youtu.be/Cb8NXqHiS4U</a>
		13 Proton-Proton cycle.	<a href="https://www.youtube.com/watch?v=OufwBhwTdc4">https://www.youtube.com/watch?v=OufwBhwTdc4</a>
		14 Formation of red gain.	<a href="https://www.youtube.com/watch?v=ReeavRq8ekU">https://www.youtube.com/watch?v=ReeavRq8ekU</a>
		15 Radioactivity.	<a href="https://www.youtube.com/watch?v=Zc9xfUnrTxx">https://www.youtube.com/watch?v=Zc9xfUnrTxx</a>
		16 Radio active decay is an exponential.	<a href="https://www.youtube.com/watch?v=K8IaH3adKz8">https://www.youtube.com/watch?v=K8IaH3adKz8</a> <a href="https://youtu.be/UxnFsVv1tKw">https://youtu.be/UxnFsVv1tKw</a> <a href="https://youtu.be/fES21Eoqebw">https://youtu.be/fES21Eoqebw</a> <a href="https://youtu.be/oFdr_vMKOCw">https://youtu.be/oFdr_vMKOCw</a>
		17 alpha decay	<a href="https://www.youtube.com/watch?v=gwl2lnl9ujc">https://www.youtube.com/watch?v=gwl2lnl9ujc</a> <a href="https://youtu.be/HRwev6cwGHo">https://youtu.be/HRwev6cwGHo</a>
		18 beta decay	<a href="https://www.youtube.com/watch?v=uqAA_D9Mi_I">https://www.youtube.com/watch?v=uqAA_D9Mi_I</a>
		19 gamma decay	<a href="https://www.youtube.com/watch?v=eJvmVav8Kw8">https://www.youtube.com/watch?v=eJvmVav8Kw8</a>
		20 artificial radioactivity.	<a href="https://www.youtube.com/watch?v=IE84sZPHuBw">https://www.youtube.com/watch?v=IE84sZPHuBw</a>
14	Smiconductor electronics; Materials, devices and simple circuits	1 Formation of energy bands.	<a href="https://www.youtube.com/watch?v=ZMgexvuG8E">https://www.youtube.com/watch?v=ZMgexvuG8E</a>
		2 Distinguish between conductors, insulators a	<a href="https://www.youtube.com/watch?v=ntauf_aqehA">https://www.youtube.com/watch?v=ntauf_aqehA</a>
		3 Intrinsic semiconductor.	<a href="https://www.youtube.com/watch?v=E15L_NvPuthE">https://www.youtube.com/watch?v=E15L_NvPuthE</a>
		4 Extrinsic semiconductor.	<a href="https://en.wikipedia.org/wiki/Extrinsic_semiconductor">https://en.wikipedia.org/wiki/Extrinsic_semiconductor</a>
		5 Formation of n-Type semiconductor	<a href="https://www.youtube.com/watch?v=s7ZIOX7ucR8">https://www.youtube.com/watch?v=s7ZIOX7ucR8</a>
		6 Formation of p-Type semiconductor.	<a href="https://www.youtube.com/watch?v=s7ZIOX7ucR8">https://www.youtube.com/watch?v=s7ZIOX7ucR8</a>
		7 p-n junction	<a href="https://www.google.co.in/search?q=p-n+junction&amp;source=lnms&amp;tbm=vid&amp;sa=X&amp;ved=0ahUKewiOl8b4g-LYAhUFT18KHsfuC7o0_AUIDCgD&amp;biw=1217&amp;bih=958">https://www.google.co.in/search?q=p-n+junction&amp;source=lnms&amp;tbm=vid&amp;sa=X&amp;ved=0ahUKewiOl8b4g-LYAhUFT18KHsfuC7o0_AUIDCgD&amp;biw=1217&amp;bih=958</a>
		8 Potential barrier.	<a href="https://www.youtube.com/watch?v=itL2MOdZtaA">https://www.youtube.com/watch?v=itL2MOdZtaA</a>
		9 Depletion region.	<a href="https://www.youtube.com/watch?v=SuftmAEC9JWA">https://www.youtube.com/watch?v=SuftmAEC9JWA</a>
		10 Diffusion current.	<a href="https://www.youtube.com/watch?v=XruZz_Ma7UE">https://www.youtube.com/watch?v=XruZz_Ma7UE</a>



## II PUC PHYSICS

SLNO	CHAPTERS	SUB TOPIC	RELATED LINKS
		11 Drift current.	<a href="https://www.youtube.com/watch?v=o8egrwD5jsM">https://www.youtube.com/watch?v=o8egrwD5jsM</a>
		12 Semiconductor diode.	<a href="https://www.youtube.com/watch?v=wo-L-HIMarY">https://www.youtube.com/watch?v=wo-L-HIMarY</a>
		13 Biasing of semiconductor diode.	<a href="https://www.tutorialspoint.com/semiconductors/biasing_of_pn_junction.asp">https://www.tutorialspoint.com/semiconductors/biasing_of_pn_junction.asp</a>
		14 Breakdown voltage.	<a href="https://www.youtube.com/watch?v=kdTI3SgpznY">https://www.youtube.com/watch?v=kdTI3SgpznY</a>
		15 Action of p-n junction	<a href="https://www.youtube.com/watch?v=e2OXQF9XmFU">https://www.youtube.com/watch?v=e2OXQF9XmFU</a>
		16 Rectification	<a href="https://study.com/academy/lesson/what-is-rectification.html">https://study.com/academy/lesson/what-is-rectification.html</a>
		17 Full wave rectifier.	<a href="https://www.youtube.com/watch?v=oLtvGPqd7vo">https://www.youtube.com/watch?v=oLtvGPqd7vo</a>
			<a href="https://youtu.be/oLtvGPqd7vo">https://youtu.be/oLtvGPqd7vo</a>
		18 Half wave rectifier.	<a href="https://www.youtube.com/watch?v=LTFxKkPrRFA">https://www.youtube.com/watch?v=LTFxKkPrRFA</a>
			<a href="https://youtu.be/8Bzt-FFvRgQ">https://youtu.be/8Bzt-FFvRgQ</a>
		19 Zener diode.	<a href="https://www.youtube.com/watch?v=xSOHfsHTS88">https://www.youtube.com/watch?v=xSOHfsHTS88</a>
		20 I-V characteristics of Zener diode.	<a href="https://www.youtube.com/watch?v=UDAHgqkCJno">https://www.youtube.com/watch?v=UDAHgqkCJno</a>
		21 Zener diode as a voltage regulator.	<a href="https://www.youtube.com/watch?v=jG2YAITWxvc">https://www.youtube.com/watch?v=jG2YAITWxvc</a>
		22 Photo diode	<a href="https://www.youtube.com/watch?v=SFc673IEvOA">https://www.youtube.com/watch?v=SFc673IEvOA</a>
			<a href="https://youtu.be/d4zO39K_ce8">https://youtu.be/d4zO39K_ce8</a>
		23 I-V Characteristics of photo diode.	<a href="https://www.youtube.com/watch?v=keiVDxIEbDw">https://www.youtube.com/watch?v=keiVDxIEbDw</a>
		24 LED Working.	<a href="https://www.youtube.com/watch?v=uvsy 1-zo4Q">https://www.youtube.com/watch?v=uvsy 1-zo4Q</a>
		25 Solarcell	<a href="https://www.youtube.com/watch?v=2AXoqvnI5nM">https://www.youtube.com/watch?v=2AXoqvnI5nM</a>
		26 I-V Characteristics of solar cell.	<a href="https://www.youtube.com/watch?v=ToKQY5eQQvM">https://www.youtube.com/watch?v=ToKQY5eQQvM</a>
		27 Transistor	<a href="https://www.youtube.com/watch?v=7ukDKVHnac4">https://www.youtube.com/watch?v=7ukDKVHnac4</a>
		28 Terminals of transistor.	<a href="https://www.youtube.com/watch?v=-8ztz9Wm4M">https://www.youtube.com/watch?v=-8ztz9Wm4M</a>
		29 Action of npn- Transistor.	<a href="https://www.youtube.com/watch?v=yOmPCiPlaEg">https://www.youtube.com/watch?v=yOmPCiPlaEg</a>
		30 Action of pnp-Transistor.	<a href="https://www.youtube.com/watch?v=ZCQOoc4bnrU">https://www.youtube.com/watch?v=ZCQOoc4bnrU</a>
		31 Transistor characteristics.	<a href="https://www.youtube.com/watch?v=jk5CZ_rRAcE">https://www.youtube.com/watch?v=jk5CZ_rRAcE</a>
		32 Transistor as a switch.	<a href="https://www.youtube.com/watch?v=5DoYuxDzczQ">https://www.youtube.com/watch?v=5DoYuxDzczQ</a>
		33 Transistor as an amplifier.	<a href="https://www.youtube.com/watch?v=xd23EmudlbU">https://www.youtube.com/watch?v=xd23EmudlbU</a>
		34 Voltage gain.	<a href="https://www.youtube.com/watch?v=24ekAYrGymk">https://www.youtube.com/watch?v=24ekAYrGymk</a>
		35 Transistor as an oscillator.	<a href="https://www.youtube.com/watch?v=815DNVr9fvM">https://www.youtube.com/watch?v=815DNVr9fvM</a>
		36 Integrated circuits	<a href="https://www.youtube.com/watch?v=frv2LM6PDkU">https://www.youtube.com/watch?v=frv2LM6PDkU</a>
		37 Types of IC's depending on nature of input signal	<a href="https://www.youtube.com/watch?v=SyYXehCO6PE">https://www.youtube.com/watch?v=SyYXehCO6PE</a>
			<a href="https://youtu.be/Wv_a_zSuLcs">https://youtu.be/Wv_a_zSuLcs</a>
			<a href="https://youtu.be/Wv_a_zSuLcs">https://youtu.be/Wv_a_zSuLcs</a>
15	Communication systems	1 Block diagram of generalized communication system	<a href="https://www.youtube.com/watch?v=-lxANGhcDul">https://www.youtube.com/watch?v=-lxANGhcDul</a>
			<a href="https://youtu.be/Oox-TIDw3T4">https://youtu.be/Oox-TIDw3T4</a>
			<a href="https://youtu.be/6qWX4Wotvd8">https://youtu.be/6qWX4Wotvd8</a>
		2 Terminology used in electronic communication	<a href="https://www.youtube.com/watch?v=kzmEWzTazkM">https://www.youtube.com/watch?v=kzmEWzTazkM</a>
		3 Ground waves.	<a href="https://www.youtube.com/watch?v=exqzAn37O7o">https://www.youtube.com/watch?v=exqzAn37O7o</a>
		4 Sky waves.	<a href="https://www.youtube.com/watch?v=MU5xwic7dzo">https://www.youtube.com/watch?v=MU5xwic7dzo</a>
			<a href="https://youtu.be/F1Vb7r8aHco">https://youtu.be/F1Vb7r8aHco</a>
		5 Space waves	<a href="https://www.youtube.com/watch?v=RYqGC-oMdfM">https://www.youtube.com/watch?v=RYqGC-oMdfM</a>
		6 Amplitude modulation.	<a href="https://www.youtube.com/watch?v=OEubAxBfqKU">https://www.youtube.com/watch?v=OEubAxBfqKU</a>
		7 Block diagram of AM - Transistor.	<a href="https://www.youtube.com/watch?v=uDHJ5XK2vnk">https://www.youtube.com/watch?v=uDHJ5XK2vnk</a>

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- 10 <http://www.physicsclassroom.com/>
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## Online Courses

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<http://academicearth.org>  
<http://academicearth.org/physics/>
- 2 SWAYAM  
[www.swayam.gov.in](http://www.swayam.gov.in)
- 3 iitbombay  
<https://www.iitbombayx.in/>
- 4 free video lectures  
<http://freevidelectures.com/University/IIT-Madras>
- 5 The National Institute of Open Schooling (NIOS)  
<http://www.nios.ac.in/>

## Library

NATIONAL DIGITAL LIBRARY

<https://ndl.iitkgp.ac.in/>