

# DRONACHARYA

## College of Engineering

KHENTAWAS, FARRUKHNAGAR, GURGAON, HR

Department: Applied Sciences & Humanities

Academic Session: 2017-18 (Jan-June 2018)

Lesson Plan for the Semester started w.e.f 08.01.2018

Subject with code: PHYSICS II (PHY-102-F)

Name of Faculty with designation : Dr .Vaishali Dixit

Month	Date & Day	Sem-Class	Unit	Topic/Chapter covered	Academic activity	Test / assignment
January	09.01.2018 Tuesday	II-ECE /EEE	1	Space Lattice, Unit Cell, Translational vectors	.....	Assignment of 02 Ques. given
	11.01.2018 Thursday	II-ECE /EEE	1	Miller Indices, Simple crystal Structure		Assignment of 02 Ques. given
	16.01.2018 Tuesday	II-ECE /EEE	1	X-ray diffraction, Laue Method		Assignment of 02 Ques. given
	18.01.2018 Thursday	II-ECE /EEE	1	Powder method, Bonding in Solids, Point defects in solids		Assignment of 02 Ques. given
	23.01.2018 Tuesday	II-ECE /EEE	1	Elementary idea of Quarks, Gluons and hadros, Difficulties with classical Physics		Assignment of 02 Ques. given
	25.01.2018 Thursday	II-ECE /EEE	3	Photoconductivity in insulating crystal, effect of traps and application of photo conductivity		Assignment of 02 Ques. given
	30.01.2018 Tuesday	II-ECE /EEE	3	Photo voltaic cell , solar cells		Assignment of 02 Ques. given
February	06.02.2018 Tuesday	II-ECE /EEE	4	Atomic magnetic moments/orbital diamagnetism, classical theory of diamagnetism		Assignment of 02 Ques. given
	08.02.2018 Thursday	II-ECE /EEE	4	Theory of diamagnetism		Assignment of 02 Ques. given
	15.02.2018 Thursday	II-ECE /EEE	4	Classical theory of Paramagnetism		Assignment of 02 Ques. given
	20.02.2018 Tuesday	II-ECE /EEE	4	Ferromagnetism, Molecular fields and domain		Assignment of 02 Ques. given
	22.02.2018 Thursday	II-ECE /EEE	4	classical theory of diamagnetis		Assignment of 02 Ques. given
	27.02.2018 Tuesday	II-ECE /EEE	2	Features of nano systems, Concepts of quantum size effect		Assignment of 02 Ques. given

<b>March</b>	<b>06.03.2018 Tuesday</b>	<b>II-ECE /EEE</b>	<b>2</b>	Element of classical free electron theory and its limitations,Drude's theory of conduction		<b>Assignment of 02 Ques. given</b>
	<b>08.03.2018 Thursday</b>	<b>II-ECE /EEE</b>	<b>2</b>	Quantum theory of free electron		<b>Assignment of 02 Ques. given</b>
	<b>13.03.2018 Tuesday</b>	<b>II-ECE /EEE</b>	<b>2</b>	Fermi level and density of state		<b>Assignment of 02 Ques. given</b>
	<b>15.03.2018 Thursday</b>	<b>II-ECE /EEE</b>	<b>2</b>	Fermi Dirac distribution function		<b>Assignment of 02 Ques. given</b>
	<b>27.03.2018 Tuesday</b>	<b>II-ECE /EEE</b>	<b>2</b>	Thermionic Emission and Richardson's equation		<b>Assignment of 02 Ques. given</b>
<b>April</b>	<b>03.04.2018 Tuesday</b>	<b>II-ECE /EEE</b>	<b>1</b>	Introduction to Quantum Mechanics- Simple concepts.		<b>Assignment of 02 Ques. given</b>
	<b>05.04.2018 Thursday</b>	<b>II-ECE /EEE</b>	<b>1</b>	Black body radiation, Discovery of plank's constant		<b>Assignment of 02 Ques. given</b>
	<b>10.04.2018 Tuesday</b>	<b>II-ECE /EEE</b>	<b>1</b>	Group velocity, Phase velocity		<b>Assignment of 02 Ques. given</b>
	<b>12.04.2018 Thursday</b>	<b>II-ECE /EEE</b>	<b>1</b>	Time dependent, independent Schrodinger Wave equation		<b>Assignment of 02 Ques. given</b>
	<b>24.04.2018 Tuesday</b>	<b>II-ECE /EEE</b>	<b>1</b>	Elementary idea of Quantum Statistics, Particle in a box		<b>Assignment of 02 Ques. given</b>
	<b>26.04.2018 Thursday</b>	<b>II-ECE /EEE</b>	<b>1</b>	Expectation Value and Ehrenfest Theorem		<b>Assignment of 02 Ques. given</b>
		<b>II-ECE /EEE</b>	<b>3</b>	Origin of energy band, Kronig Penney model		<b>Assignment of 02 Ques. given</b>
	<b>II-ECE /EEE</b>	<b>3</b>	E K diagram, Brillouin zones ,Concepts of effective mass and hole		<b>Assignment of 02 Ques. given</b>	
	<b>II-ECE /EEE</b>	<b>3</b>	Classification of Solids to metals, Semiconductors and insulators		<b>Assignment of 02 Ques. given</b>	
	<b>II-ECE /EEE</b>	<b>3</b>	Hall effect and its applications		<b>Assignment of 02 Ques. given</b>	