

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-IT /ECS | 1 | Space Lattice, Unit Cell, Translational vectors | | Assignment of 02 Ques. given |
| | 10.01.2018 Wednesday | II-IT /ECS | 1 | Miller Indices, Simple crystal Structure | | Assignment of 02 Ques. given |
| | 16.01.2018 Tuesday | II-IT /ECS | 1 | X-ray diffraction, Laue Method | | Assignment of 02 Ques. given |
| | 17.01.2018 Wednesday | II-IT /ECS | 1 | Powder method, Bonding in Solids, Point defects in solids | | Assignment of 02 Ques. given |
| | 23.01.2018 Tuesday | II-IT /ECS | 1 | Elementary idea of Quarks, Gluons and hadros, Difficulties with classical Physics | | Assignment of 02 Ques. given |
| | 24.01.2018 Wednesday | II-IT /ECS | 4 | Atomic magnetic moments/orbital diamagnetism, classical theory of diamagnetism | | Assignment of 02 Ques. given |
| | 30.01.2018 Tuesday | II-IT /ECS | 4 | Theory of diamagnetism | | Assignment of 02 Ques. given |
| February | 06.02.2018 Tuesday | II-IT /ECS | 4 | Classical theory of Paramagnetism | | Assignment of 02 Ques. given |
| | 07.02.2018 Wednesday | II-IT /ECS | 4 | Ferromagnetism, Molecular fields and domain | | Assignment of 02 Ques. given |
| | 20.02.2018 Tuesday | II-IT /ECS | 3 | Photoconductivity in insulating crystal, effect of traps and application of photo conductivity | | Assignment of 02 Ques. given |
| | 21.02.2018 Wednesday | II-IT /ECS | 3 | Photo voltaic cell , solar cells | | Assignment of 02 Ques. given |
| | 27.02.2018 Tuesday | II-IT /ECS | 2 | Element of classical free electron theory and its limitations,Drude's theory of conduction | | Assignment of 02 Ques. given |
| | 28.02.2018 Wednesday | II-IT /ECS | 2 | Quantum theory of free electron | | Assignment of 02 Ques. given |

| March | 06.03.2018 Tuesday | II-IT /ECS | 2 | Fermi level and density of state | Assignment of 02 Ques. given |
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| | 07.03.2018 Wednesday | II-IT /ECS | 2 | Fermi Dirac distribution function | Assignment of 02 Ques. given |
| | 20.03.2018 Tuesday | II-IT /ECS | 2 | Thermionic Emission and Richardson's equation | Assignment of 02 Ques. given |
| | 21.03.2018 Wednesday | II-IT /ECS | 1 | Introduction to Quantum Mechanics- Simple concepts. | Assignment of 02 Ques. given |
| April | 03.04.2018 Tuesday | II-IT /ECS | 1 | Black body radiation, Discovery of plank's constant | Assignment of 02 Ques. given |
| | 04.04.2018 Wednesday | II-IT /ECS | 1 | Group velocity, Phase velocity | Assignment of 02 Ques. given |
| | 10.04.2018 Tuesday | II-IT /ECS | 1 | Time dependent, independent Schrodinger Wave equation | Assignment of 02 Ques. given |
| | 11.04.2018 Wednesday | II-IT /ECS | 1 | Elementary idea of Quantum Statistics, Particle in a box | Assignment of 02 Ques. given |
| | 25.04.2018 Tuesday | II-IT /ECS | 1 | Expectation Value and Ehrenfest Theorem | Assignment of 02 Ques. given |
| | | II-IT /ECS | 2 | Features of nano systems, Concepts of quantum size effect | Assignment of 02 Ques. given |
| | | II-IT /ECS | 3 | Origin of energy band, Kronig Penney model | Assignment of 02 Ques. given |
| | | II-IT /ECS | 3 | E K diagram, Brillouin zones ,Concepts of effective mass and hole | Assignment of 02 Ques. given |
| | | II-IT /ECS | 3 | Classification of Solids to metals, Semiconductors and insulators | Assignment of 02 Ques. given |
| | | II-IT /ECS | 3 | Hall effect and its applications | Assignment of 02 Ques. given |