

Koyana Education Society's  
Balasaheb Desai College, Patan  
Department of Physics  
Monthly Teaching Plan-Year-2023-2024  
January- 2024

Name of the Teacher-Mr. M.D. Jadhav

Dates	Unit	Sub unit	Teaching Method Aids
<b>B.Sc.-I</b>			
02/01/2024	<b>2 Magnetism</b>	Blot-Savart's law	Lecture
06/10/2023		Application to straight conductor,	Lecture
9/01/20323		Application to circular coil,	Lecture
11/01/2023		Application to solenoid carrying current,	Lecture
15/01/2023		Divergence and curl of magnetic field	Lecture
18/01/2023		Magnetic vector potential, Ampere's circuital law.	Lecture
20/01/2024		Magnetic properties of material permeability, susceptibility	Lecture
24/01/2024		Brief introduction of para, dia, and ferro magnetic materials	Lecture
27/01/2024	<b>3 Electromagnetic Induction</b>	Faraday's laws of electromagnetic induction, Lenz's law,	Lecture
<b>B,Sc.II</b>			
1/01/2024	<b>3: Polarization of Light</b>	Idea of polarization, polarization by double refraction,	Lecture-
2/01/2024		Huygens explanation of double refraction through uniaxial crystal,	Lecture
8/01/2024		Nicol prism (construction, working),	Lecture
8/01/2024		production of circularly and elliptically polarized light,	Lecture-
15/01/2024		polarimeter.	Lecture with Demo
16-/1/2024	<b>UNIT II 1 Interference</b>	Principle of Superposition, Coherence and condition for interference	Discussion
23/01/2024		Division of amplitude and division of wave front, Lloyds single mirror (determination of wavelength of light of monochromatic source),	Discussion
29/1/2024		Interference in thin parallel films (reflected light only),	Lecture
30/01/2024		Wedge shaped films	Lecture
<b>B.Sc.III</b>			
1/01/2024	<b>2. Molecular Spectra:</b>	Rotational spectra,	Lecture



Dates	Unit	Sub unit	Teaching Method Aids
2/01/2024		Vibrational energy levels,	Lecture
4/01/2024		Vibrational spectra,	Lecture
4/01/2024		Vibration – rotation spectra,	Lecture
6/01/2024		Electronic spectra of diatomic molecules	Lecture
8/01/2024	<b>UNIT-II 1. Raman Spectra:</b> (04 hours),	Raman Effect, Experimental arrangement of Raman Effect,	Lecture
9/01/2024		Characteristic properties of Raman lines	Lecture
11/01/2024		Classical and quantum theory of Raman Effect,	Lecture
13/01/2024		Difference between Raman spectra and infrared spectra,	Lecture
15/01/2024		Applications of Raman effect	Lecture
16/01/2024	<b>2. Structure of Universe:</b>	Introduction of Cosmology,	Lecture
18/01/2024		Big-Bang theory, Oscillating theory	Lecture
20/01/2024		Steady state theory, Hubble law,	Lecture
22/01/2024		Hubble Constant	Lecture
23/01/2024		Cosmological tests,	Lecture
25-27/01/2024		Definition of Galaxy, Milky Way galaxy,	Lecture
29/01/2024		Our Solar system, Origin of solar system	Lecture
30/01/2024		Condensation theory; arguments for and against the theory.	Lecture

  
**PRINCIPAL**  
**Balasaheb Desai Collage**  
**Patan, Dist: Satara**