

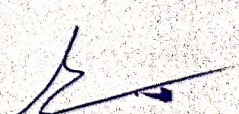
Koyana Education Society's  
Balasaheb Desai College, Patan  
Department of Physics  
Monthly Teaching Plan-Year-2023-2024  
July- 2023

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

Dates	Unit	Sub unit	Teaching Method Aids
<b>B.Sc.-I PaperII Mechanics I</b>			
1/07/2023	<b>1 Gravitation (6 hours).</b>	Newton's law of gravitation,	Lecture
2/7/2023		Motion of a particle in a central force field	Lecture
7/07/2023		motion in a plane, angular momentum is conserved	Lecture
8/07/2023		Kepler's laws (statement only),	Lecture
15/07/2023		Satellite in circular orbit and applications,	Lecture, Chart
16/07/2023		Geosynchronous orbits, Weightlessness,	Lecture
22/07/2023		Basic idea of global positioning system (GPS)	Lecture
23/7/2023	<b>2 Elasticity (9 hours),</b>	Introduction (Hooke's law, Elastic moduli-Relation between elastic constants),	Lecture
30/7/2023		Poisson's Ratio-Expression for Poisson's ratio in terms of elastic constants	Lecture
<b>B.Sc.-II Paper VI Waves &amp; Optics Acoustics ,Sound</b>			
5/07/2023	<b>1.Superposition of Harmonic Oscillations</b>	Linearity and superposition principle,	Lecture (6 hr)
6/07/2023		Superposition of two collinear harmonic oscillations for oscillations having equal frequencies: Analytical method	Lecture-
13-26/07/2023		oscillations having different frequencies (Beats),	Lecture
14/07/2023		Superposition of two perpendicular harmonic oscillations: for oscillations having equal frequencies (Analytical method)	Lecture-
19/07/2023		Oscillations having different frequencies (Lissajous figures),	Lecture-
20/07/2023		Uses of Lissajous figures.	Lecture-
26/07/2023	<b>2.Coupled Oscillations (4 hr)</b>	Frequencies of coupled oscillatory systems,	Lecture-



Dates	Unit	Sub unit	Teaching Method Aids
27/07/2023	2.Coupled Oscillations	normal modes and normal co-ordinates, energy of coupled oscillations,	Lecture-
30/9/2023		energy transfer in coupled oscillatory system.	Lecture
B.Sc.-III PHYSICS Paper XII Digital and Analog Circuits and Instrumentation			
3-4/07/2023	1. Digital Electronics (06 hours),	Review of basic logic gates, Derived logic gates (NOR, NAND, XOR and XNOR gates )	Lecture-Chart
6-7/07/2023		NAND and NOR gates as universal gates, De Morgan's theorems,	Lecture
10-11/07/2023		R-S flip flop, J-K flip- flop, Half adder,	Lecture
13-14 /07/2023		Full adder, 4-bit parallel binary adder, Counter.	
17/07/2023	2. Transistors Amplifier (04)	Review of output characteristics of transistor in common emitter mode, Single stage transistor CE amplifier	Lecture
18/07/2023		D.C. and A.C. equivalent circuits,	Lecture
23/07/2023		load line analysis-d.c. load line, a.c. load line and Q point	Lecture
25/9/2023	3. Sinusoidal Oscillators (08) Br,	Oscillator: Feedback in amplifiers and its types, theory of feedback oscillator,	Lecture
26/07/2023		Barkhausen's criterion for sustained oscillations,	Lecture

  
**PRINCIPAL**  
 Balasaheb Desai College,  
 Patan, Dist. Satara