

LESSON PLAN 2023-24

Class: B.Sc. Ist sem		
Subject: Physics		
Name of Paper: Mechanics - I		
Name of Teacher: ANJU SHARMA		
Month	Week	
August	Week 1st	Unit-I, Dynamics of a single particle, Dynamics of system of particles
	Week 2nd	Centre of mass, conservation of linear momentum, conservation of energy
	Week 3rd	Unit-2 Angular displacement, angular velocity, angular acceleration & angular momentum
	Week 4th	Torque, conservation of angular momentum, Motion of Rocket, frame of reference
September	Week 1st	Non inertial frame of reference & Pseudo forces.
	Week 2nd	Unit-3 Rotation of rigid body, moment of inertia, Kinetic energy of rotation
	Week 3rd	Theorems of perpendicular & parallel axes with proof
	Week 4th	MOI of solid sphere, hollow sphere, spherical shell, solid cylinder, hollow cylinder
October	Week 1st	MOI of solid bar of rectangular cross section, Acceleration of a body rolling down inclined plane
	Week 2nd	Unit-4 Simple harmonic motion
	Week 3rd	Differential eqn of SHM & its solution
	Week 4th	K.E & P.E, total energy & time averages
November	Week 1st	Damped & forced harmonic oscillators
	Week 2nd	Test & Revision

Teacher's Signature





# RAJIV GANDHI GOVT. COLLEGE FOR WOMEN BHIWANI

## LESSON PLAN

### SESSION 2023-24 (ODD SEM)

**DEPARTMENT: PHYSICS**

**NAME OF FACULTY: Dr. NAVNEET SINGH**

**Class: B.Sc. 5<sup>th</sup> Sem. Sec A & B**

**Subject: SOLID STATE PHYSICS**

#### **July 2023:**

4<sup>th</sup> week: Crystal structure, Crystalline and amorphous solids, Liquid crystals, Practical: Study of B-H Curve

#### **August 2023:**

1<sup>st</sup> week: periodicity lattice and basis, Crystal translation vectors and axes, unit cell, primitive cell, wigner seitz primitive cell, Practical: Four Probe method to measure energy Band Gap

2<sup>nd</sup> week: Symmetry operations for a two dimensional crystal, Bravais lattice in two and three dimensions, Practical: e/m Thomson method

3<sup>rd</sup> week: Crystal plane and Miller indices, crystal structure of NaCl and diamond and test of unit 1. Practical: Revision

4<sup>th</sup> week: X-ray diffraction, Bragg's law, and experimental X-ray diffraction methods, Practical: Double slit interference by He-Ne laser

#### **September 2023:**

1<sup>st</sup> week: K-space, reciprocal lattice and its physical significance, reciprocal lattice vector, Practical: Diameter of a thin wire by diffraction method

2<sup>nd</sup> week: Reciprocal lattice to simple cubic lattice, BCC, FCC, Practical: Revision

3<sup>rd</sup> week: Free electron gas models and its failure, sommerfeld quantum theory, Practical: Four Probe method to measure energy Band Gap

4<sup>th</sup> week: Hall effect, lattice vibrations, specific heat of solids, Practical: e/m Thomson method

#### **October 2023:**

1<sup>st</sup> week: Dulong and Petit's law Einstein theory of specific heat of solids, Practical: Revision

2<sup>nd</sup> week: Debye theory of specific heat of solids and Test of Unit-2, Practical: Double slit interference by He-Ne laser

3<sup>rd</sup> week: Dia-, para-, ferri- and ferro- magnetic materials, Practical: Diameter of a thin wire by diffraction method

4<sup>th</sup> week: Classical Langevin theory of dia and para magnetic domains, Practical: Revision

#### **November 2023:**

1<sup>st</sup> week: Curie's law, Weiss theory of ferromagnetism and ferromagnetic domains, Practical: Assessment Viva-voce of all practicals

2<sup>nd</sup> week: Introduction to superconductivity, survey of superconductivity, Practical: Assessment Viva-voce of all practicals

3<sup>rd</sup> week: Superconducting systems, types of superconductors, Practical: Assessment Viva-voce of all practicals

4<sup>th</sup> week: Revision of syllabus, Practical: Assessment Viva-voce of all practicals.

  
SIGNATURE



RAJIV GANDHI GOVT. COLLEGE FOR WOMEN BHIWANI  
LESSON PLAN  
SESSION 2023-24 (EVEN SEM)

DEPARTMENT: Physics

NAME OF FACULTY: ~~Dr. Bhisim Narayan~~ BHISM NARAYAN

Class: B.Sc I<sup>st</sup> (Sem.)

Subject: Electrostatics and magnetism

JULY 2023:

WEEK 4: Review of vector algebra, gradient, divergence and their significance

AUGUST 2023:

WEEK 1:

Vector integration, line, surface and volume integral of vector fields.

WEEK 2:

Gauss - divergence theorem and Stoke's theorem.

WEEK 3:

Numerical problems.

WEEK 4:

Electrostatic field, electric flux, Gauss theorem of electrostatics; Application of Gauss Theorem - electric field due to a point charge,

SEPTEMBER 2023:

WEEK 1: Infinite line of charge, uniformly charged spherical shell and

WEEK 2:

solid sphere, plane charged sheet, electric potential as line integral of electric field, potential due to a point charge, elec-dipole, uniformly charge spherical shell

WEEK 3:

WEEK 4:

solid sphere, calculation of electric field from potential. Nif Capacitance of an isolated spherical conductor, parallel plates,

OCTOBER 2023:

WEEK 1:

Spherical and cylindrical condensers, Energy per unit volume in electrostatic field, Dielectric medium

WEEK 2:

Polarisation, Displacement vector, Gauss's theorem in dielectric.

WEEK 3:

Parallel plate capacitor completely filled with dielectric Numerical problem.

WEEK 4:

Magnetostatics - Biot-Savart's law & its applications as straight line, Circular coil.

NOVEMBER 2023:

WEEK 1: ~~Cylindrical condenser, Energy per unit volume~~

WEEK 2:

Solenoid carrying current, Divergence and Curl of magnetic field

WEEK 3:

Magnetic vector potential, Ampere's circuital law, Magnetic properties of material, Magnetic intensity.

WEEK 4:

Magnetic induction, permeability, magnetic susceptibility, Brief introduction of dia, para- and ferro-magnetic materials

Bhisim



RAJIV GANDHI GOVT. COLLEGE FOR WOMEN, BHIWANI

Lesson Plan

Session 2023-24 (Odd Semester)

Name of Subject Incharge Mrs. Premata yadav

Class B.Sc 2nd year (3rd sem)

Subject Optics

Month & Year	Topics
July, 2023	wave optics : electromagnetic nature of light. Huygens Principle, Interference : Division of amplitude and division of wavefront. Young's Double slit experiment.
August	Fresnel's Biprism, Phase change on reflection, Wedge-shaped films, Fringes of equal inclination. Newton's Ring. Michelson's Interferometer.
September	Fresnel Diffraction, Fresnel's Assumptions, Fresnel's Half-Period zones. Theory of a Zone Plate and its application. Qualitative description for Fresnel diffraction pattern of a straight edge, a slit and a wire.
October	Single slit, Double slit and multiple slits, various kind of diffraction grating, resolving power of grating, Rayleigh's criteria Resolving Power of an optical instrument.
November	Double refraction, Plane polarized light - production and analysis, Half & Full wave plates, optical activity, optical fibres - construction and working, Modes of propagation Applications.

Premata  
SIGNATURE





# RAJIV GANDHI GOVT. COLLEGE FOR WOMEN BHIWANI

## LESSON PLAN

SESSION 2023-24 (EVEN SEM)

**DEPARTMENT: PHYSICS**

**NAME OF FACULTY: Dr. NAVNEET SINGH**

**Class: B.Sc. 6<sup>th</sup> Sem. Sec A & B**

**Subject: NUCLEAR PHYSICS**

**FEBRUARY 2024:**

WEEK 1: Nuclear mass and binding energy, binding energy curve, Properties of nuclei, Determination of nuclear mass by Bain Bridge and Jordan mass spectrograph. Practical: Study of Harley Oscillator

WEEK 2: Determination of nuclear charge by Mosley law, Determination of size of nuclei by Rutherford back scattering. Practical: Study of C-E Transistor Characteristics

WEEK 3: Interaction of heavy charged particle, Alpha disintegration and its theory, energy loss of heavy charged particle, energetic of Alpha decay. Practical: Study of C-B Transistor Characteristics

WEEK 4: Range and straggling of Alpha particle, Geiger Nuttal law, Introduction of lighter charged particle, origin of continuous beta spectrum, Practical: Study of C-C Transistor Characteristics

**MARCH 2024**

WEEK 1: types of beta decay, energy of beta decay energy loss of beta particle, range of electron, absorption of beta particles, Practical: Resolving power of grating

WEEK 2: Interaction of Gamma ray, Nature of Gamma rays, energetic of gamma rays, photoelectric, Compton and pair production, Practical: Resolving power of prism

WEEK 3: electron positron annihilation, absorption of gamma rays and its application, Practical: Study of Op-amp Characteristics

WEEK 4: Types of Nuclear reactions, conservation laws, Q value of nuclear reaction and reaction threshold, Practical: Study of Collpits Oscillator

**APRIL 2024 :**

WEEK 1: Nuclear reactor, general aspects of reactor design, Nuclear fission and fusion reactors, Practical: Revision

WEEK 2: Linear accelerator, Tendon accelerator, Cyclotron, betatron, Practical: Revision

WEEK 3: ionization chamber, proportional counter, G.M. counter, Practical: Revision

WEEK 4: scientilation counter and semiconductor detector, Practical: Revision

  
SIGNATURE



# RAJIV GANDHI GOVT. COLLEGE FOR WOMEN BHIWANI

## LESSON PLAN

SESSION 2023-24 (EVEN SEM)

DEPARTMENT: PHYSICS

Class: B.Sc 2nd sem (NMTCS)

NAME OF FACULTY: BHISM NARAYAN

Subject: physics (Mechanics-II)

JANUARY 2024 :

WEEK 3:

} university exams

WEEK 4:

FEBRUARY 2024 :

WEEK 1:

} university & practical exams

WEEK 2:

WEEK 3: Degrees of freedom, constraints & classifications, generalised co-ordinates, Principle of virtual work, D'Alembert Principle

WEEK 4: Lagrange's eq<sup>n</sup> of simple & compound pendulum, Atwood's machine, Hamilton's Principle & derivation of Lagrange's eq<sup>n</sup> from Hamilton's Principle.

MARCH 2024

WEEK 1: Reference systems, inertial frames, Galilean invariance & conservation laws.

WEEK 2: Newtonian relativity Principle, Michelson-Morley exp<sup>t</sup> & its outcome, special theory of relativity, Lorentz transformation

WEEK 3: Length contraction & time dilation, velocity addition theorem, variation of mass with velocity, energy mass equivalence,

WEEK 4: massless particles, relativistic doppler effect. Transformation of energy & momentum.

APRIL 2024 :

WEEK 1: Elasticity: Hooke's law, Stress - strain relation, elastic-moduli - relation between elastic constants, Poisson's Ratio

WEEK 2: work done in stretching & twisting a wire, twisting couple on a cylinder.

WEEK 3: Torsional pendulum, determination of  $\eta$  by static method

WEEK 4: Determination of  $n$  &  $I$ ,  $\sigma$  by Searle's method.

Bhim Narayan

SIGNATURE





# RAJIV GANDHI GOVT. COLLEGE FOR WOMEN BHIWANI

## LESSON PLAN SESSION 2023-24 (EVEN SEM)

DEPARTMENT: PHYSICS

NAME OF FACULTY: ANJU SHARMA

Class: B.Sc-2nd sem (NMH.C.S.)

Subject: Physics (waves & electrodynamics)

JANUARY 2024 :

WEEK 3:

WEEK 4:

} university exams & practical exams

FEBRUARY 2024 :

WEEK 1:

WEEK 2:

} practical exams

WEEK 3: Faraday laws of EMI, Lenz's law, self & mutual inductance,  $L$  of single coil,  $M$  of two coils

WEEK 4: Energy stored in mag. field, eqn of continuity of current, displacement current, Maxwell's equations in vacuum & medium.

MARCH 2024

WEEK 1: Energy density in EM field, EMW propagation through vacuum & isotropic dielectric medium

WEEK 2: Superposition of two collinear harmonic oscillations - linearity & superposition principle (i) Oscillations having equal & different frequencies

WEEK 3: Superposition of perpendicular harmonic oscillations, graphical & analytical methods, Lissajous figures with equal & unequal frequency & their uses.

WEEK 4: wave eqn & its solution, Particle wave velocities, intensity of wave, group velocity, Phase velocity, definition & properties of

APRIL 2024 : wavefront.

WEEK 1: Huygens principle, velocity of longitudinal waves in a fluid in a pipe, Newton's formula for velocity of sound, Laplace's correction, Reflection

WEEK 2: Transmission of sound waves at boundary. The string as force oscillator, velocity of transverse vibrations of stretched strings

WEEK 3: Transverse waves on a string, Travelling & standing waves on string.

WEEK 4: Normal modes of string, Reflections & transmission of energy.

*Anju*

SIGNATURE

# RAJIV GANDHI GOVT. COLLEGE FOR WOMEN BHIWANI

## LESSON PLAN

SESSION 2023-24 (EVEN SEM)

DEPARTMENT: PHYSICS

NAME OF FACULTY: AMIT

Class: B.Sc. 4<sup>th</sup> sem [N.M + C.S.]

Subject: Physics [Semiconductor devices]

JANUARY 2024:

WEEK 3:

WEEK 4:

} University Exam & Practical

FEBRUARY 2024:

WEEK 1: Introduction, P-N junction diode, Semiconductor Basic

WEEK 2: Current Flow in Semiconductors, Forward and Reverse Biasing.

WEEK 3: Drift and Diffusion Current, characteristics of Diode, static and Dynamic Resistance.

WEEK 4: Half-Wave Rectifier.

MARCH 2024

WEEK 1: ~~Half-wave Rectifier~~ Full wave Rectifier, Problem of unit-I

WEEK 2: Introduction of Transistor, types of Transistor, Current flow in transistor.

WEEK 3: Characteristics of CB, CE and CC configuration.  
Relation between current gains.

WEEK 4: DC Load line and Q-point.

APRIL 2024:

WEEK 1: H-Parameters equivalent circuit. Test - Unit-II II

WEEK 2: FET and its advantages and Amplifiers classes

WEEK 3: Feedback circuit in Amplifier, Basic of operational Amplifier.

WEEK 4: Gain of op-amp, Application of op-amps.

  
SIGNATURE





# RAJIV GANDHI GOVT. COLLEGE FOR WOMEN BHIWANI

HANSI ROAD, BHIWANI-127021 (HARYANA)

Phone No 01664-255118

Email:-gcwbhiwani@gmail.com

AISHE Code:- C-28016

Website:- www.gcwbhiwani.ac.in

Ref. No. ....

Dated .....

## LESSON PLAN SESSION 2023-24 (EVEN SEM)

IV sem

DEPARTMENT- PHYSICS

NAME OF FACULTY Ms. Premleeta Yadav

SUBJECT PHYSICS (Quantum Mechanics)

JANURAY 2024

WEEK 3

Black body radiation, theory of radiation,

Photon, photoelectric effect and

WEEK 4

Einstein's photoelectric effect. Compton effect.

Phase velocity, group velocity.

FEBRUARY 2024

WEEK 1

Heisenberg's uncertainty principle,  
Time, energy and angular momentum

WEEK 2

Uncertainty principle from de-broglie wave.  
Wave function and its physical significance.

WEEK 3

Properties of wave function, Orthogonality and  
normalization, Time dependent Schrodinger.

WEEK 4

Independent Schrodinger wave eq<sup>n</sup>,  
Momentum & energy operators, Hermitian  
operator.

MARCH 2024

WEEK 1

WEEK 2

WEEK 3

WEEK 4

APRIL 2024

WEEK 1

WEEK 2

WEEK 3

WEEK 4

Eigen value and eigen functions, Commutator.  
Stationary states, Probabilities and  
normalization, Probability current densities.  
Particle in 1-D infinite square well.  
Application of Schrodinger eq<sup>n</sup>, one-D  
potential barrier, solution of Schrodinger  
eq<sup>n</sup> for harmonic oscillator,  
Expectation value, Test.

Schrodinger eq<sup>n</sup> in spherical co-ordinates,  
Separation of variables for  $r$ ,  $\theta$  &  $\phi$ .  
coordinates, solution for  $\theta$  and  
 $\phi$  equations, Spherical Harmonics  
Space quantization, Electron spin,  
and Spin Angular momentum.  
Larmor's theorem, Spin Magnetic Moment,  
Steen-Gerlach Experiment, Bohr Magneton

Premata  
SIGNATURE





# RAJIV GANDHI GOVT. COLLEGE FOR WOMEN BHIWANI

## LESSON PLAN

SESSION 2023-24 (EVEN SEM)

DEPARTMENT: physics  
Class: B.Sc (CS) VI<sup>th</sup> sem

NAME OF FACULTY: Mukesh  
Subject: physics

JANUARY 2024 :

WEEK 3: } University Exam & Practical  
WEEK 4: }

FEBRUARY 2024 :

WEEK 1: Nuclear Properties, B-E/A Curve, mag. quadrupole moment & Electric dipole

WEEK 2: Liquid drop model and Shell Model, Semi-empirical Mass formula

WEEK 3:  $\alpha$ -decay process, Theory of  $\alpha$ , Geiger-Nuttall law,  $\beta$ -decay, neutrino-hypothesis

WEEK 4: Gamma-emission, Kinematics of  $\gamma$ , Nuclear Rxn, Q-value, Rutherford scattering exper

MARCH 2024

WEEK 1: Bloch Bethe formula, interaction of gamma rays with matter, CE, PE & PP interaction

WEEK 2: Gas filled detector, ionization chamber, Proportional Counter, G.M. Counter, Scintillation & Semi-conductors

WEEK 3: Atomic spectra - Bohr Model, vector atom model.

WEEK 4: Quantum number associated with vector model, penetrating & non-penetrating orbit

APRIL 2024 :

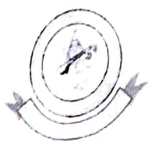
WEEK 1: - Holi holidays

WEEK 2: Alkali spectra, Spin-orbit interaction, LS, & JJ coupling, Zeeman effect.

WEEK 3: Paschen beta effect, Stark effect, vib & rot. spectra, Raman effect.

WEEK 4: properties of laser, Einstein coefficient, threshold condition, He-Ne laser & Ruby laser Construction & working

Mukesh  
11/3/24  
SIGNATURE



RAJIV GANDHI GOVT. COLLEGE FOR WOMEN BHIWANI

LESSON PLAN

SESSION 2023-24 (EVEN SEM)

DEPARTMENT: PHYSICS

NAME OF FACULTY: AMIT

Class: B.Sc. 3<sup>rd</sup> Sem (N.M.T.C.S) Subject: Physics (Thermodynamics)

JULY 2023:

WEEK 4: Introduction of unit-I<sup>st</sup>, Zeroth law of thermodynamics.

AUGUST 2023:

WEEK 1: First law of thermodynamics, conservation of heat, Thermodynamics Processes.

WEEK 2: Relation between specific heat, work done of Thermodynamic Process.

WEEK 3: Compressibility and expansion coefficient, Reversible and Irreversible process, second law of Thermodynamics.

WEEK 4: Entropy, Carnot cycle of theorem, T-S and P-V Diagram.

SEPTEMBER 2023:

WEEK 1: Unit-I Test, Absolute Zero concept, Third law of Thermodynamics.

WEEK 2: Thermodynamic Potential, Maxwell's Relations.

WEEK 3: Joule-Thompson effect, Clausius-Clapeyron equation & 1<sup>st</sup> & 2<sup>nd</sup>!

WEEK 4: Relation between  $C_p$  &  $C_v$ , Tds equation. Problem unit-II

OCTOBER 2023:

WEEK 1: Introduction of unit-III, Kinetic theory of Gases Postulates, Maxwell's law.

WEEK 2: Derivation of Maxwell's law of distribution of velocities and its experimental verification. Maxwell's speed's expression.

WEEK 3: Mean free path, Brownian motion

WEEK 4: Real gases, Vander Waal's equation.

NOVEMBER 2023:

WEEK 1: Law of equipartition of energy, specific heat of gases for Mono and diatomic gases.

WEEK 2: Black body Radiation, concept of Energy density.

WEEK 3: Planck's law, Wien's law and Rayleigh-Jeans Law.

WEEK 4: Stefan Boltzmann and Wein's displacement law from Planck's law, Unit Test.

*[Signature]*





# RAJIV GANDHI GOVT. COLLEGE FOR WOMEN BHIWANI

## LESSON PLAN SESSION 2023-24 (EVEN SEM)

DEPARTMENT: PHYSICS

Class: VI<sup>th</sup> sem

NAME OF FACULTY: Ms. Sharmila

Subject: Atomic and Molecular spectroscopy

FEBRUARY 2024 :

WEEK 1:

WEEK 2: Atomic spectra, Bohr's atomic model, Hydrogen spectra

WEEK 3: Energy levels and spectra, correspondence principle, atomic excitation

WEEK 4: Franck Hertz experiment, vector atom model, quantum no. associated with vector atom model.

MARCH 2024

WEEK 1: penetrating and non-penetrating orbits, alkali metal spectra, spectral lines in different series of alkali metal spectra.

WEEK 2: spin-orbit interaction, doublet term separation,

LL, SS, LS and JJ couplings, Zeeman effect.

WEEK 3: Paschen, Back effect, Stark effect, electronic energies of molecules.

WEEK 4:

APRIL 2024 :  
WEEK 1: quantization of vibrational and rotational energies, Raman effect, Stokes and anti-Stokes lines.

WEEK 2: Main features of Laser, Directionality, high intensity, high degree of coherence.

WEEK 3: Einstein's co-efficient and possibility of amplification threshold condition for Laser emission.

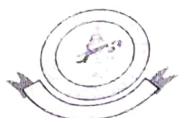
WEEK 4: Laser pumping, He-Ne laser and Ruby laser, applications

SIGNATURE  
Sharmila

A.H. Prof.

Dept. of Physics

R.G.G.C.W. Bhiwani



RAJIV GANDHI GOVT. COLLEGE FOR WOMEN BHIWANI

LESSON PLAN

SESSION 2023-24 (~~EVEN SEM~~) Odd sem

DEPARTMENT:

Physics

NAME OF FACULTY: Ms. Sharmila

Class: V<sup>th</sup> sem

Subject: Statistical Physics

JULY 2023:

WEEK 4:

Probability, some basic considerations of probability

AUGUST 2023:

WEEK 1:

Basic idea of permutations and combinations, combination possessing maximum probability, combination possessing min. prob.

WEEK 2:

Distribution of molecules in two boxes, case with weightage, phase space, microstates and macrostates, statistical fluctuations

WEEK 3:

Accessible states, Entropy and thermodynamic probability, concept of Ensemble and types of Ensemble.

WEEK 4:

postulates of statistical physics, phase space and 1D harmonic oscillator, free particle, Division of phase space into cells.

SEPTEMBER 2023:

WEEK 1:

Basic approach in three statistics MB distribution law,

WEEK 2:

thermodynamic fn of an ideal gas, Classical Entropy expression, Gibbs's paradox condition of equilibrium b/w two system in thermal contact

WEEK 3:

Entropy and probability. Bose Einstein statistics.

WEEK 4:

Thermodynamic relations of a completely degenerate Bose gas, Bose Einstein condensation.

OCTOBER 2023:

WEEK 1:

Liquid He, photon gas, applications of B.E statistics to Planck's radiation law.

WEEK 2:

F.D statistics, thermodynamic relations of a completely degenerate Fermi gas.

WEEK 3:

Fermi energy, electron gas in metal, zero point energy, specific heat of metals, thermionic emission.

WEEK 4:

NOVEMBER 2023:

WEEK 1:

White Dwarf stars, Chandrasekhar Mass unit.

WEEK 2:

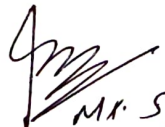
Comparison b/w three statistics: MB, B-E and FD

WEEK 3:

Students query/doubts session.

WEEK 4:

Test of all units.

  
Mr. Sharmila  
Asst. Prof., dept. of  
Physics  
R.G.G.C.W. Bhiwani





# RAJIV GANDHI GOVT. COLLEGE FOR WOMEN BHIWANI

HANSI ROAD, BHIWANI-127021 (HARYANA)

AISHE Code:- C-28016

Website:- [www.gcwbhiwani.ac.in](http://www.gcwbhiwani.ac.in)

Phone No 01664-255118

Email:- [gcwbhiwani@gmail.com](mailto:gcwbhiwani@gmail.com)

Ref. No. ....

Dated .....

LESSON PLAN 2023-24 (Even Semester)			
Class: B.Sc/BA 4th Semester			
Name of Paper: Mechanics (20UMTH401)			
Name of Faculty: Kavita Khandelwal			
Month	Week	Theory's Topic	Practical
Feb 2024	Week 1 <sup>st</sup>	Unit-I. Composition and resolution of forces,	Assignment 1
	Week 2 <sup>nd</sup>	Resultant of two Parallel forces and their applications.	Assignment 2
	Week 3 <sup>rd</sup>	Unit-II Moments and Couples,	Assignment 3
	Week 4 <sup>th</sup>	Analytical conditions of equilibrium of coplanar forces.	Assignment 4
Mar 2024	Week 1 <sup>st</sup>	Unit - III. Velocity and acceleration along radial,	Assignment 5
	Week 2 <sup>nd</sup>	Transverse, Tangential and Normal directions.	Assignment 6
	Week 3 <sup>rd</sup>	Relative velocity and acceleration.	Assignment 7
	Week 4 <sup>th</sup>	Holi break	
April 2024	Week 1 <sup>st</sup>	Simple harmonic motion. Class Test	Assignment 8
	Week 2 <sup>nd</sup>	Unit - IV. Elastic strings	Assignment 9
	Week 3 <sup>rd</sup>	Newton's laws of motion .	Assignment 10
	Week 4 <sup>th</sup>	Work. Power and Energy .Revision and Class Test	

Signature of Teacher/Faculty

## Lesson Plan (Odd Semester) 2023-24

Name : AJEET KUMAR  
 Department : Physics  
 Class and Section : B.Sc. III SEM V  
 Subject : PHYSICS PRACTICAL

Month: August

Week	Topic
1	Basic Knowledge of Physics Practicals
	Basic Knowledge of Physics Practicals
	Basic Knowledge of Physics Practicals
2	Basic Knowledge of Physics Practicals
	Basic Knowledge of Physics Practicals
	Basic Knowledge of Physics Practicals
3	Diameter of Wire using diffraction method by LASER
	Diameter of Wire using diffraction method by LASER
	Diameter of Wire using diffraction method by LASER
4	Diameter of Wire using diffraction method by LASER
	Diameter of Wire using diffraction method by LASER
	Diameter of Wire using diffraction method by LASER
5	<b>Verification of truth Tables of Logic Gates</b>
	<b>Verification of truth Tables of Logic Gates</b>
	<b>Verification of truth Tables of Logic Gates</b>

Month: September

Week	Topic
1	<b>Verification of truth Tables of Logic Gates</b>
	<b>Verification of truth Tables of Logic Gates</b>
	<b>Verification of truth Tables of Logic Gates</b>
2	Electron to Mass Ration by Thomson Method
	Electron to Mass Ration by Thomson Method
	Electron to Mass Ration by Thomson Method
3	Electron to Mass Ration by Thomson Method
	Electron to Mass Ration by Thomson Method
	Electron to Mass Ration by Thomson Method



4	Introduction to CRO
	Introduction to CRO
	Introduction to CRO
5	Study of B-H Curve by CRO
	Study of B-H Curve by CRO
	Study of B-H Curve by CRO

Month: October

Week	Topic
1	Study of B-H Curve by CRO
	Study of B-H Curve by CRO
	Study of B-H Curve by CRO
2	Measurement of Energy Gap by Four Probe Methode
	Measurement of Energy Gap by Four Probe Methode
	Measurement of Energy Gap by Four Probe Methode
3	Measurement of Energy Gap by Four Probe Methode
	Measurement of Energy Gap by Four Probe Methode
	Measurement of Energy Gap by Four Probe Methode
4	To study double slit interference by He-Ne LASER
	To study double slit interference by He-Ne LASER
	To study double slit interference by He-Ne LASER
5	To study double slit interference by He-Ne LASER
	To study double slit interference by He-Ne LASER
	To study double slit interference by He-Ne LASER

Month : November

Week	Topic
1	To Study Light Emitting Diode
	To Study Light Emitting Diode
	To Study Light Emitting Diode
2	To Study Light Emitting Diode
	To Study Light Emitting Diode
	To Study Light Emitting Diode
3	To Print Odd and Even Numbers
	To Print Odd and Even Numbers

	To Print Odd and Even Numbers
4	To Print Odd and Even Numbers
	To Print Odd and Even Numbers
	To Print Odd and Even Numbers
5	Revisions
	Revisions
	Revisions



## Lesson Plan (Even Semester) 2023-24

AJEET KUMAR

Physics

B.Sc. III SEM VI

PHYSICS PRACTICAL

Name:  
Department  
Class and Section:  
Subject:

Week	Date	Topic
1	01-Feb-24	Transistor Characteristic: in CB Configuration
	02-Feb-24	Transistor Characteristic: in CB Configuration
	03-Feb-24	Transistor Characteristic: in CB Configuration
2	08-Feb-24	Transistor Characteristic: in CB Configuration
	09-Feb-24	Transistor Characteristic: in CB Configuration
	10-Feb-24	Transistor Characteristic: in CB Configuration
3	15-Feb-24	Transistor Characteristic: in CE Configuration
	16-Feb-24	Transistor Characteristic: in CE Configuration
	17-Feb-24	Transistor Characteristic: in CE Configuration
4	22-Feb-24	Transistor Characteristic: in CE Configuration
	23-Feb-24	Transistor Characteristic: in CE Configuration
	24-Feb-24	Transistor Characteristic: in CE Configuration
5	29-Feb-24	<b>Study of Hartley Oscillator</b>
	01-Mar-24	<b>Study of Hartley Oscillator</b>
	02-Mar-24	<b>Study of Hartley Oscillator</b>
6	07-Mar-24	<b>Study of Hartley Oscillator</b>
	08-Mar-24	<b>Holiday</b>
	09-Mar-24	<b>Study of Hartley Oscillator</b>
7	14-Mar-24	<b>Resolving Power of Prism</b>
	15-Mar-24	<b>Study of Hartley Oscillator</b>
	16-Mar-24	<b>Resolving Power of Prism</b>
8	21-Mar-24	<b>Resolving Power of Prism</b>
	22-Mar-24	<b>Resolving Power of Prism</b>
	23-Mar-24	<b>Resolving Power of Prism</b>
9	28-Mar-24	<b>Resolving Power of Grating</b>
	29-Mar-24	<b>Resolving Power of Prism</b>
	30-Mar-24	<b>Resolving Power of Grating</b>
10	04-Apr-24	<b>Resolving Power of Grating</b>
	05-Apr-24	<b>Resolving Power of Grating</b>
	06-Apr-24	<b>Resolving Power of Grating</b>
11	11-Apr-24	<b>Holiday</b>

	12-Apr-24	To study OPAMPS
	13-Apr-24	To study OPAMPS
12	18-Apr-24	To study OPAMPS
	19-Apr-24	To study OPAMPS
	20-Apr-24	To study OPAMPS
13	25-Apr-24	To study OPAMPS
	26-Apr-24	To Study G.M.Counter
	27-Apr-24	To Study G.M.Counter
14	02-May-24	To Study G.M.Counter
	03-May-24	To Study G.M.Counter
	04-May-24	To Study G.M.Counter
15	09-May-24	To Study G.M.Counter
	10-May-24	Holiday
	11-May-24	To study OPAMPS
16	16-May-24	To study OPAMPS
	17-May-24	To study OPAMPS
	18-May-24	To study OPAMPS
17	23-May-24	Revisions
	24-May-24	Revisions
	25-May-24	Revisions
18	30-May-24	Revisions
	31-May-24	Revision/Tests/Assigments