

Date	Class	Work Done	M. Sc. I & III Semester
03/10/2019			
10/10/2019			
12/10/2019			
15/10/2019			
17/11/2019			
21/11/2019			
23/11/2019			
26/11/2019			

Capacitance and Ferrite Transformers
 Diode Rectifier, Magnetic Transformer
 Hilbert Space, Dirac Notation, ladder operators
 Concept of state and citizenship.

Probability, Tensor and Group Theory
 Simple Harmonic motion, Euler's Equation
 Angular momentum and identical particles.
 Parliament of India, Legislative Bills.

M. Sc. II Semester

Differential amplifier, sawtooth circuit
 Stark effect, Pauli's exclusion principle
 Scattering amplitude, Perturbation theory
 Operating systems, Parts of computer
 Treatment of Data

K-Map, Combinational Circuit
 Layer Cooling and trapping of atoms
 Quantization of fields.
 Lock Down

1. Provided regular feedback and encouraged to build confidence.
2. Allowed extra time to complete assignments and tests.
3. Encouraged slow learner to maintain learning journals to track progress.

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Date	Work Done	M. Sc. III Sem.	Work Done	Sign of Teacher

Miller indices, low equation
 Magnetic dipole moment, Nuclear Inter.
 Parisien and Kaplace theorem. Green the.
 Schedule tribes in India

Magnitism - Dia, Para, Ferro
 Nuclear reaction, Fermi-Kuriez Plot
 Maxwell equation, Lorentz transformation
 Problems of Health and sanitization

M. Sc. IV Semester

Home-Rothery electron Compounds
 Micro wave spectroscopy
 Liouville's theorem, Partition function
 Digital satellite Transmission
 Microsare remote sensing

Layer Physics and Elasticity of material
 Raman spectroscopy
 Fermi-Dirac distribution function
 Lock Down

- Note: 4. Providing class notes, e-books, mental library.
5. Focusing on Problem Solving Approach.

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Class	Work Done	Work Done	Work Done	Sign. of Teacher	
B. Sc. I Year	<p>9/10/2019 Magnetization Current, Maxwell's 3rd eqn 11/10/2019 Coulter's Kinematics of moving fluid 14/10/2019 Molecular Inter-Diffusion of Surfaces 16/10/2019 Plane electromagnetic waves</p>	<p>Planck's Law Black Body Radiation Coulomb's Law</p>	<p>Quantum Postulates Thomson's Cathode Ray Body Radiation Paints</p>	<p>Light Emitting Diode Diode equation Oscillators Origin of Quantum Theory</p>	<p>PLK SKL SKL SKL</p>
B. Sc. II Year	<p>4/11/2019 Flux of Vector Field, Stoke's theorem 7/11/2019 Electromagnetic induction 13/11/2019 Keplers Law, Equation of motion 19/11/2019 Force on a moving charges</p>	<p>Maxwell's 3rd eqn Thomson's Cathode Ray Probability Thomson's</p>	<p>relationships interference and diffraction dynamics Variable</p>	<p>Velocity addition theorem Half and full wave rectifier Gyromagnon effect Evaluation of Parameter</p>	<p>SKL SKL SKL SKL</p>
B. Sc. III Year	<p>4/12/2020 Discovery of isotopes, Euler's eqn 7/12/2020 Reynolds no. and Stokes law 13/12/2020 Green's theorem and differential 15/12/2020 Electron gun sensitivity of CRT 20/12/2020 Transient in LCR CRT</p>	<p>Canonical Classical Third Law Concept of Entropy</p>	<p>distribution law Thomson's of thermodynamics Plate space Zener Plate</p>	<p>Bohr's Transformation Transistor & FET GM Counter shell model Zener diode</p>	<p>SKL SKL SKL SKL</p>

Note: 1. Allowed extra time to complete assignments and tests.
2. Provided extra practice to reinforce understanding.
3. Encouraged a growth mindset emphasizing that abilities are not fixed and intelligence can be developed.

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Note: 1. Providing video lecture, e-books, departmental library, and class mat.
2. Main focus on concept building and imagination approach.

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Class M.Sc. I Sem

Work Done M.Sc. III Sem

Signature
Teacher

7/9/2020 Analytical Approx, Toler and Larmor Eq
10/9/2020 Rotational kinetic energy, Torgue free rot
16/9/2020 LK B-quantization rule, Variation method
22/9/2020 Condition and Condonation adm
26/9/2020 Symmetric and Conservation law

First Brillouin Zones, Group & Phase Velocity
Shell Model, Effective range theory
Electromagnetic field tensor
Weisskopf - Concept

5/10/2020 Transformation, Matrix superposition
6/10/2020 Hermitian-Jacobi equation, Kepler's Prob
12/10/2020 Simple Harmonic oscillator
16/10/2020 Principle of separation of Power
19/10/2020 Spin angular momentum, Pauli spin mat

De Haas Van Alphen effect, Super Conductivity
Decay rates, Comparative half lives
Time varying field, Gauge Transformation
Some major tribes and Central tribes
Role of NGOs in tribal development

2/11/2021 M.Sc. II Sem
Equivalent circuit, Opto-electronics device
6/11/2021 Stark effect for Hydrogen atom level
9/11/2021 Low energy scattering,
11/11/2021 Method of residual
15/11/2021 Invariance of Dirac equation,

M.Sc. IV Sem
Elementary idea of Condensate
Hyperfine structure and quadrupole moment
Bose-Einstein statistics
Specific heat of diatomic gas
DeWitt analog communication

3/12/2021 Operation Amp with Negative Feedback
6/12/2021 General feature of Electronic spectra
8/12/2021 Properties of Gamma rays
11/12/2021 Computer memory
17/12/2021 Creation and annihilation operators

Pictorial dispersion and losses
NMR and NAR techniques
Fermi-Dirac statistics, Planck's formula
Pondal theory of light, specific heat
Multiphoton Raman scattering etc

1. Research assistance provided to help slow learners
2. Regularly monitored progress and support strategies as needed
3. Ensured access to resources like libraries and online resources.

Focus on Concept building and Numerical Problem Solving techniques.

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Signature
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Govt Postgraduate College
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Class	Work Done	Work Done	Done	Work Done	Signature
Date	B.Sc. I year	B.Sc.	II year	B.Sc. III year	Teacher
5/9/2020	Rise of decay of current in CR and LR circuit	Einstein's Relativism	Co-efficient of Refraction	Schrodinger Equation	No
9/9/2020	Principle of cyclotron	Zone plate	Dispersion of Polarization	Reitlier Emitter Follower	No
15/9/2020	Velocity selector analysis mechanism	Cleavias	Newton's	Zonec diode	No
24/9/2020	Setting, Transverse B-Field	Third law	of Hemodynamics	Transistor and IET	No
3/10/2020	Mass spectrophotograph	Carnot Theorem	& exercises	Transistor and amplifier	No
11/10/2020	Kittgaard figure	Temperature	making	C- Programming	No
10/10/2020	Self Inductance	Concave	Coatings	low equation	No
14/10/2020	Power dissipation	Cardinal	Paints	Hydretell's test	No
20/10/2020	Transit and steady state	Joule Thomson	Coaling effect	Ferro mag oxides	No
5/11/2020	Caus law and its application	Principle of Tolerence	star system and diffraction	Caermour expansion of B-	No
8/11/2020	Discharge Tube, Stokes theorem	Hydrography & Ferromatic	Population in	Density of states	No
12/11/2020	Electrical susceptibility	Non-linear	Principle	Cisist- weld law	No
16/11/2020	Gaussian box, Electric field	Blazed	Coating	Buter alloy and Miller index	No
19/11/2020	Function of two and three variables	Non-linear	Optics	Energy band in Solids	No

1. Decided complex tasks into smaller.

2. Offered additional practice exercises to reinforce understanding.

3. One to one attention is provided to address specific needs.

Note - 14 Providing e-books, Online resources

Class notes and departmental

Sl. No.	Topic	Book	Page	Year
1	Harmonic oscillators	Holography	100	2021
2	Complex impedance and ac	Physics	100	2021
3	Inductance of energy stored	M-B	100	2021
4	Self inductance	Paul Thomson	100	2021
5	Maxwell's Equations	Basu - First	100	2021
6	Principle of focusing lens	Non-charge	100	2021
7	Flux of vector fields	Concare	100	2021
8	Ampere law and Biot-Savart law	Optical	100	2021
9	Molecular inter-penetration of	Nickelson	100	2021
10	Surface tension	Prance Triph	100	2021
11	Max speed graphs	Corralls	100	2021
12	Electromagnetic induction	He-Ne	100	2021
13	Galvanometer and its application	Opalant's	100	2021
14	Mutual induction	TDs Para-	100	2021
15	Electrical susceptibility	Regulger	100	2021
16	Network theorems		100	2021
17	Containing sphere in uniform		100	2021
18	Electric fields		100	2021
19	Magnitization vectors		100	2021
20	Construction and working of CRO		100	2021

1. Ensured access to resources like Libmanis and online resources.
2. Regular progress monitoring has been done.
3. Create self-forming learning plans.

Note: Main focus on student problem solving.

Work Done
M.Sc. I Sem

8/9/2023	Probability, Laplace Transforms	
11/9/2023	Heplers Problem, Rotational Kinetic energy	
13/9/2023	Variation method, Principle of separation of Power, WKB Quantization rule	
16/9/2023	Concept of spin and citizenship	
7/10/2023	Fermion, Matrix representation	
11/10/2023	Single Harmonic motion, Legendre Transform	
15/10/2023	Spin Angular momentum, Hilbert Space	
19/10/2023	Angular momentum and identical particles	
22/10/2023	Conservation Theorem and Symmetry Prop.	
<u>M.Sc. II Sem.</u>		
2/11/2023	Low Energy Scattering, Scattering Amplit.	
6/11/2023	Differential Amplitude, R-map	
10/11/2023	Operating system, Part of computer	
16/11/2023	Treatment of Data	
22/11/2023	Quantization of fields, Combinatorial etc	
3/12/2023	Stark effect, Pauli's exclusion Principle	
7/12/2023	R-S, D, T-K, T, M/S Flip/Flop	
13/12/2023	Stark effect for hydrogen atom level	
17/12/2023	Invariance of Dirac equation	
21/12/2023	Properties of Gamma matrices	

1. Provided individualized attention to address specific needs. S.M. Capt.

2. Extra practice had been offered to reinforce understanding. Govt Post Graduate College, Ambikapur, C.G.

3. We divided tasks into smaller steps.

Work Done
M.Sc. III Sem

live equation, First Brillouin Zone	
Diagonalization - Spin, Parity and Excess.	
Nuclear reaction and Fermi-Kurie plot	
Electromagnetic Field Tensor,	
De-Haas van Alphen effect, Maxwell eqn	
Time Varying field, Gauge Transformation	
Poisson and Laplace Theorems	
Wadlow Concept, Super Conductivity	
Dray rates Comparative half lives	
Electrostatic Potential Energy	
<u>M.Sc. IV Sem.</u>	
Low Energy Physics and Elasticity of material	
Bose - Einstein's statistics	
NMR and NAR Techniques	
Satellite analog Communication	
Micro wave remote sensing	
Raman spectroscopy, specific heat	
Specific heat of diatomic gas	
Tonic diatomic gas, Relaxation time	
Fermi-Dirac Distribution function	
Shottky and forward diode	

4. Providing class notes, e-book, Online lecture and Problem Solving techniques. Head of Physics Deptt Govt Postgraduate College, Ambikapur, C.G.

Sl. No.	Work Done	Work	Done	Signature of Teacher
1	Dot and Cross Products	Thermal Expansion	Equation of Homogyn. Ensembles	S.R.
2	Vibration of a magnet	Classical	Maxwell's Equations	S.R.
3	Harmonic oscillator	Third Law	of Homogyn. Ensembles	S.R.
4	Keplers Law	Arnet Theorem		S.R.
5	Cyclotron and its application	Cibbs	ensemble distribution	S.R.
6	Function of Herz New Law	D-B	distribution	S.R.
7	Kinetic Potential Energy	E-D	distribution	S.R.
8	Gaussian Billiard	Einstein	distribution	S.R.
9	Caus-Dirac Theorem	B.Sc. II Sem	distribution	S.R.
10	Electrical susceptibility	Zone Plate	Optics	S.R.
11	Computer importance	Holography	And non	S.R.
12	Maximum Power Transfer	Linear	Optics	S.R.
13	Transient and steady state	Optical	resonator	S.R.
14	Magnetic Permittibility	Trubscience	alignment	S.R.
15	Sensitivity of CRO	He-Ne Laser	Laser	S.R.
16	Ampere's Law	Rigidity	Scission	S.R.
17	Bio-sensort Law	Fermi's	Principle	S.R.
18	Power consumed by wire etc	Corrosion	Principle	S.R.
19	Magnetic dipole moment	Misiktion	Principle	S.R.

Note:
1. Provided opportunities for selection. **Full**
of their own learning.
2. Provided oral presentation skills. **Govt Post Graduate College Ambikapur, C. G.**
3. Encouraged peer teaching.

Note by **Pravir Singh** **Head of Physics Deptt Govt Post Graduate College Ambikapur, C. G.** regarding **departmantal library, and classmate**

Page	Work Done	Work	Date	Work Done	Sign of Teacher
5/10/2003	Libsgour physics	Units of	III sem	Thermodynamics	Dr
6/10/2003	Elements of Mass spectrometry	Classes of	Q. Sc. IV sem	Michelson-Morley Experiment	Dr
9/10/2003	Surface tension and surface energy	Cardinal		Fermi magnetism,	Dr
14/10/2003	Viscosity	Probability		Curie-Weiss law	Dr
17/10/2003	Rheumatism of fluids	Entropy		Dia. Para & Ferro magnet	Dr
3/11/2003	Capillarity, Thoria	Carroll's		Miller index	Dr
4/11/2003	Spacing constant	Canonical		Law equation, Boltz decay.	Dr
10/11/2003	Simple Harmonic motion	One dimension		Nature and position concept	Dr
14/11/2003	Keplers law	Black body		radiation of Paramagnet	Dr
20/11/2003	Thoria in different shapes	Gamma		Raman spectra ray	Dr
	<u>Q. Sc. V sem</u>	<u>B. Sc.</u>	<u>IV sem</u>	Pure rotation spectra.	Dr
01/12/2003	Potential due to spherical body	Two site		Transition and its configuration	Dr
6/12/2003	Power dissipation	Present and		Boolean algebra	Dr
10/12/2003	Discharge Tubes	Polarization		logic gates	Dr
15/12/2003	Force on a straight conductor	Can cure		Diode equation	Dr
21/12/2003	Complex impedance	Population		Zener diode	Dr
1/1/2004	Self inductance, Mutual inductance	Reflection		Tunnel diode	Dr
5/1/2004	Electrical susceptibility	Crystal,		FET & MOS FET	Dr
11/1/2004	Bio-sewert law.	Shaded		Emitter Follower	Dr
15/1/2004	Muonins and Nepton theory	Diffraction		Half and full wave rectifier	Dr
19/1/2004	Charge distribution.	Non-linear		Transistor as amplifier.	Dr

1. Self assessment tool has been provided.
2. Peer mentoring program had been organized.
3. Encouraged slow learners to prioritize self-care.

Note: Providing departmental library e-book, online lecture, class notes