

C.R. KISAN COLLEGE, JIND

(Lesson Plan)

Name of the Assistant Professor: **ASHA**

Class and Section: **B.Sc Ist 2nd Semester.**

Lesson Plan of the Subject: **PHYSICS**

Nomenclature of the Paper: **SEMECONDUCTOR DEVICES**

Weeks	Days	Dates	Chapters	Topics
1st	1 st	01.01.2018		Introduction to Syllabus.
	2 nd	02.01.2018		Semiconductor, Intrinsic, Extrinsic
	3 rd	03.01.2018		Types of Extrinsic Semi. P-N Junction, Avalanche break
	4 th	04.01.2018		Zener diode, LED, Solar cell
	5 th	05.01.2018		Hall effect, Characteristic of P-N Junction diode
	6 th	06.01.2018		Zener diode as Voltage regulator
		7 th	07.01.2018	
2nd	1 st	08.01.2018		Photodiode, P-N Junction as Rectifier
	2 nd	09.01.2018		Types of Rectifier, Filter
	3 rd	10.01.2018		Type of filter and their circuit
	4 th	11.01.2018		Revision
	5 th	12.01.2018		Assignment Test
	6 th	13.01.2018		Introduction to Transistor
	7 th	14.01.2018		Sunday
3rd	1 st	15.01.2018		Different Configuration of Trans. C.B Trans.
	2 nd	16.01.2018		C-E characteristic of Trans, CC Characteristic
	3 rd	17.01.2018		DC Load line and analysis
	4 th	18.01.2018		Advantage and Dis-advantage of com.
	5 th	19.01.2018		Current gain of transistor
	6 th	20.01.2018		Transistor biasing
		7 th	21.01.2018	
4th	1 st	22.01.2018		Holiday
	2 nd	23.01.2018		Transistor Stabilization. Introduction.
	3 rd	24.01.2018		Various method of transistor biasing.
	4 th	25.01.2018		Continue
	5 th	26.01.2018		Holiday
	6 th	27.01.2018		Collector to base bias and Self bias
		7 th	28.01.2018	
5th	1 st	29.01.2018		Unit Test
	2 nd	30.01.2018		Assignment
	3 rd	31.01.2018		Holiday
	4 th	01.02.2018		Introduction to Amplifiers.
6th	5 th	02.02.2018		Classification of amplifiers
	6 th	03.02.2018		Continue - - -
	7 th	04.02.2018		Sunday
	1 st	05.02.2018		Transistor amplification.
	2 nd	06.02.2018		Practical CRT of transistor Amp.
	3 rd	07.02.2018		Continue - - -

7th	4 th	08.02.2018	Common base amplifier
	5 th	09.02.2018	Common emitter amplifier
	6 th	10.02.2018	Holiday
	7 th	11.02.2018	Sunday
	1 st	12.02.2018	Coupling in Amplifiers
	2 nd	13.02.2018	Holiday
	3 rd	14.02.2018	Various method of coupling, Bandwidth
8th	4 th	15.02.2018	Feedback in amplifier
	5 th	16.02.2018	Advantage of negative feedback
	6 th	17.02.2018	Distortion in amplifier
	7 th	18.02.2018	Sunday
	1 st	19.02.2018	Voltage gain
	2 nd	20.02.2018	Emitter follower CKT
	3 rd	21.02.2018	Revision
9th	4 th	22.02.2018	Revision
	5 th	23.02.2018	Unit Test
	6 th	24.02.2018	Test Discussion
	7 th	25.02.2018	Sunday
	1 st	26.02.2018	Introduction to Oscillator
	2 nd	27.02.2018	Principle of oscillator
	3 rd	28.02.2018	Vacation
10th	4 th	01.03.2018	Vacation
	5 th	02.03.2018	Vacation
	6 th	03.03.2018	Vacation
	7 th	04.03.2018	Sunday, Vacation
	1 st	05.03.2018	Barkhausen Criterion for oscillation
	2 nd	06.03.2018	Tuned collector Common emitter, OK
	3 rd	07.03.2018	Continue - - -
11th	4 th	08.03.2018	Sinusoidal Oscillator
	5 th	09.03.2018	Types of sinusoidal oscillator
	6 th	10.03.2018	Continue
	7 th	11.03.2018	Sunday
	1 st	12.03.2018	Transistor oscillator
	2 nd	13.03.2018	Essentials of transistor oscillator
	3 rd	14.03.2018	Continue - - -
12th	4 th	15.03.2018	Different type of transistor oscillator
	5 th	16.03.2018	Continue - - -
	6 th	17.03.2018	Continue - - -
	7 th	18.03.2018	Sunday
	1 st	19.03.2018	Cathode ray Oscilloscope Intro.
	2 nd	20.03.2018	Construction and working of CRO.
	3 rd	21.03.2018	Continue - - -
13th	4 th	22.03.2018	Continue - - -
	5 th	23.03.2018	Holiday
	6 th	24.03.2018	Revision
	7 th	25.03.2018	Sunday
	1 st	26.03.2018	Assignment
	2 nd	27.03.2018	Assignment viva.

	3 rd	28.03.2018	Unit Test
	4 th	29.03.2018	Holiday
	5 th	30.03.2018	Test discussion
	6 th	31.03.2018	Revision of Semiconductor units
	7 th	01.04.2018	Sunday
14th	1 st	02.04.2018	Test of Semiconductor Unit
	2 nd	03.04.2018	Revision of Diodes
	3 rd	04.04.2018	Test
	4 th	05.04.2018	Revision of filters and Rectifiers
	5 th	06.04.2018	Test
	6 th	07.04.2018	Test discussion
	7 th	08.04.2018	Sunday
15th	1 st	09.04.2018	Revision of Transistor up to characteri.
	2 nd	10.04.2018	Test
	3 rd	11.04.2018	Revision of Biasing CRT
	4 th	12.04.2018	Continue
	5 th	13.04.2018	Test
	6 th	14.04.2018	Holiday
	7 th	15.04.2018	Sunday
16th	1 st	16.04.2018	Revision of Transistor Amplifier
	2 nd	17.04.2018	Continue
	3 rd	18.04.2018	Holiday
	4 th	19.04.2018	Test
	5 th	20.04.2018	Revision of R-C Coupled, emitter
	6 th	21.04.2018	follower CRTs
	7 th	22.04.2018	Sunday
17th	1 st	23.04.2018	Test
	2 nd	24.04.2018	Revision of oscillator and diff. amp.
	3 rd	25.04.2018	Test
	4 th	26.04.2018	Revision of CRO
	5 th	27.04.2018	Continue
	6 th	28.04.2018	Test
	7 th	29.04.2018	Sunday

Signature of the Teacher

C.R. KISAN COLLEGE, JIND

(Lesson Plan)

Name of the Assistant Professor: *ASHA*

Class and Section: *B.Sc 2nd Year IVth Semester*

Lesson Plan of the Subject: *PHYSICS*

Nomenclature of the Paper: *Statistical Physics.*

Weeks	Days	Dates	Chapters	Topics
1		01.01.2018		Introduction to Syllabus.
1		02.01.2018		Systems Micro and Macro, Events
1		03.01.2018		Probability and Relation between these.
1		04.01.2018		Probability theorems and Probability Cons.
1		05.01.2018		Combinatorics and Permutations.
1		06.01.2018		Distribution of Particles in Boxes.
7 th		07.01.2018		Sunday
1		08.01.2018		Continue previous topic.
1		09.01.2018		Micro and Macro States
1		10.01.2018		Thermodynamical probability
1		11.01.2018		Constraints and Accessible States.
1		12.01.2018		Statistical fluctuations.
1		13.01.2018		Distribution of distinguishable particles.
7 th		14.01.2018		Sunday
1		15.01.2018		Continue the previous topic
1		16.01.2018		Condition of equilibrium b/w two states
1		17.01.2018		Continue.
1		18.01.2018		Entropy Concept
1		19.01.2018		Entropy and probability (Boltzmann)
1		20.01.2018		Continue the topic.
7 th		21.01.2018		Sunday
1 st		22.01.2018		Holiday
1		23.01.2018		Revision
1		24.01.2018		Test
1		25.01.2018		Test discussion.
5 th		26.01.2018		Holiday
1		27.01.2018		Introduction to 2nd unit
7 th		28.01.2018		Sunday
1		29.01.2018		Postulate of Statistical Physics
1		30.01.2018		Continue.
3 rd		31.01.2018		Holiday
1		01.02.2018		Phase space
1		02.02.2018		Derivation of phase space into cells.
1		03.02.2018		Three kinds of Statistics.
7 th		04.02.2018		Sunday
1		05.02.2018		Continue the previous topic
1		06.02.2018		Basic approach in three statistics
1		07.02.2018		M-B Statistics (energy distribution law)

4 th	08.02.2018	Continue - - -
5 th	09.02.2018	Continue - - -
6 th	10.02.2018	Holiday
7 th	11.02.2018	Sunday
1 st	12.02.2018	Speed distribution law
2 nd	13.02.2018	Holiday
3 rd	14.02.2018	Velocity distribution law
4 th	15.02.2018	Continued the previous topic
5 th	16.02.2018	Expression for average speed.
6 th	17.02.2018	Expression for r.m.s speed.
7 th	18.02.2018	Sunday
1 st	19.02.2018	Expression for average velocity.
2 nd	20.02.2018	Expression for r.m.s velocity.
3 rd	21.02.2018	Expression for most probable energy.
4 th	22.02.2018	Expression for mean energy.
5 th	23.02.2018	Difference b/w average speed, r.m.s speed.
6 th	24.02.2018	Numerical related to all this.
7 th	25.02.2018	Sunday
1 st	26.02.2018	Revision
2 nd	27.02.2018	Revision
3 rd	28.02.2018	Vacation
4 th	01.03.2018	Vacation
5 th	02.03.2018	Vacation
6 th	03.03.2018	Vacation
7 th	04.03.2018	Sunday Vacation
1 st	05.03.2018	Test
2 nd	06.03.2018	Introduction to quantum statistic.
3 rd	07.03.2018	Bose Einstein energy distribution law.
4 th	08.03.2018	Continue -
5 th	09.03.2018	Assignment viva given in 2nd unit.
6 th	10.03.2018	Planck radiation law
7 th	11.03.2018	Sunday
1 st	12.03.2018	Fermi Dirac energy distribution law
2 nd	13.03.2018	F-D gas and Degeneracy.
3 rd	14.03.2018	Fermi energy and Fermi temperature.
4 th	15.03.2018	F-D energy distribution law.
5 th	16.03.2018	F-D energy distribution law for e ⁻ metal
6 th	17.03.2018	Continued the topic
7 th	18.03.2018	Sunday
1 st	19.03.2018	Continue - -
2 nd	20.03.2018	zero point energy.
3 rd	21.03.2018	zero point pressure
4 th	22.03.2018	Average speed of electron gas.
5 th	23.03.2018	Holiday
6 th	24.03.2018	Continue the same topic.
7 th	25.03.2018	Sunday
1 st	26.03.2018	Specific heat anomaly.
2 nd	27.03.2018	M-B distribution limiting case $\beta \rightarrow \infty$, F-D.

3 rd	28.03.2018		Continue
4 th	29.03.2018		Holiday
5 th	30.03.2018		Comparison of three Statistic.
6 th	31.03.2018		Unit Test.
7 th	01.04.2018		Sunday
1 st	02.04.2018		Introduction to specific Heat of Solids
2 nd	03.04.2018		Dulong and Petit Law
3 rd	04.04.2018		Continue the same topic.
4 th	05.04.2018		Specific heat at Low temperature
5 th	06.04.2018		Einstein theory of Specific Heat
6 th	07.04.2018		Continue
7 th	08.04.2018		Sunday
1 st	09.04.2018		Criticism of Einstein theory.
2 nd	10.04.2018		Debye model of specific heat of Solids.
3 rd	11.04.2018		Continue
4 th	12.04.2018		Shortcoming of Debye theory.
5 th	13.04.2018		Continue
6 th	14.04.2018		Holiday
7 th	15.04.2018		Sunday
1 st	16.04.2018		Comparison of Einstein and Debye.
2 nd	17.04.2018		Continue
3 rd	18.04.2018		Holiday
4 th	19.04.2018		Revision
5 th	20.04.2018		Revision
6 th	21.04.2018		Test
7 th	22.04.2018		Sunday
1 st	23.04.2018		Revision of Statistical Physics - I
2 nd	24.04.2018		Revision of Statistical Physics - II
3 rd	25.04.2018		Revision of Quantum Statistics
4 th	26.04.2018		Revision of specific Heat of Solid.
5 th	27.04.2018		Full syllabus paper.
6 th	28.04.2018		Discussion
7 th	29.04.2018		Sunday

Signature of the Teacher

C.R. KISAN COLLEGE, JIND

(Lesson Plan)

Name of the Assistant Professor: ASHA

Class and Section: B.Sc IIIrd (VIth Semester)

Lesson Plan of the Subject: Physics

Nomenclature of the Paper: Atomic And Molecular

Weeks	Days	Dates	Chapters	Topics
1st	1 st	01.01.2018		Introduction to atomic Spectroscopy.
	2 nd	02.01.2018		Emission and absorption Spectra.
	3 rd	03.01.2018		Atomic Spectra, wave number.
	4 th	04.01.2018		Spectra of Hydrogen atom.
	5 th	05.01.2018		Bohr's atomic model.
	6 th	06.01.2018		Spectra of Hydrogen atom.
	7 th	07.01.2018		Sunday
2nd	1 st	08.01.2018		unquantized states and Continuous spectra
	2 nd	09.01.2018		Effect of nuclear motion on line spectra
	3 rd	10.01.2018		variation in Rydberg Constant.
	4 th	11.01.2018		Short coming of Bohr theory.
	5 th	12.01.2018		Sommerfeld quantisation rule.
	6 th	13.01.2018		de-Broglie's Inteh quantisation law.
	7 th	14.01.2018		Sunday
3rd	1 st	15.01.2018		Bohr Corresponding Principle.
	2 nd	16.01.2018		Sommerfeld extension to Bohr model.
	3 rd	17.01.2018		Sommerfeld relativistic correction
	4 th	18.01.2018		Short coming of Sommerfeld theory.
	5 th	19.01.2018		Vector atom model. Space quantisation.
	6 th	20.01.2018		Coupling of orbital and spin angular.
	7 th	21.01.2018		Sunday
4th	1 st	22.01.2018		Monday
	2 nd	23.01.2018		Spectroscopic term and their notation
	3 rd	24.01.2018		Quantum numbers
	4 th	25.01.2018		Continue. -
	5 th	26.01.2018		Holiday
	6 th	27.01.2018		Selection Rules.
	7 th	28.01.2018		Sunday
5th	1 st	29.01.2018		Rest day
	2 nd	30.01.2018		Test of Unit
	3 rd	31.01.2018		Holiday
	4 th	01.02.2018		Introduction to Unit Unit
	5 th	02.02.2018		Bohr Magneton.
	6 th	03.02.2018		Behaviour of magnetic dipole in external field.
	7 th	04.02.2018		Sunday
6th	1 st	05.02.2018		Larmor's precession and theorem
	2 nd	06.02.2018		penetrating and non penetrating orbitals.
	3 rd	07.02.2018		Quantum defects.

1	08.02.2018	Spin orbit interaction energy Quantum mechanical Calculation.
2	09.02.2018	
6	10.02.2018	Holiday
7	11.02.2018	Sunday
1	12.02.2018	Hydrogen line spectra
2	13.02.2018	Holiday
3	14.02.2018	Main feature of alkali spectra.
4	15.02.2018	Term series and limit
5	16.02.2018	Redberg and Ritz principle.
6	17.02.2018	Absorption spectra of alkali atom
7	18.02.2018	Sunday
1	19.02.2018	Fine structure in spectra of alkali
2	20.02.2018	Continue the same topic
3	21.02.2018	Intensity rules for doublets
4	22.02.2018	Continue - -
5	23.02.2018	Comparison of alkali and hydrogen spectra
6	24.02.2018	Continue - -
7	25.02.2018	Sunday
1	26.02.2018	Revision
2	27.02.2018	Test
3	28.02.2018	Vacation
4	01.03.2018	Vacation
5	02.03.2018	Vacation
6	03.03.2018	Vacation
7	04.03.2018	Sunday/Vacation
1	05.03.2018	Vector atom model for two valence e ⁻
2	06.03.2018	L-S Coupling
3	07.03.2018	Continue - -
4	08.03.2018	J-J Coupling scheme
5	09.03.2018	Interaction energy in L-S Coupling.
6	10.03.2018	Lande interval rule
7	11.03.2018	Sunday
1	12.03.2018	Periodic Classification of elements.
2	13.03.2018	Equivalent and Non equivalent e ⁻ 's
3	14.03.2018	Two valence e ⁻ system
4	15.03.2018	Continue - -
5	16.03.2018	Comparison of spectral terms in L-S and J-J
6	17.03.2018	Continue - -
7	18.03.2018	Sunday
1	19.03.2018	Hyperfine structure of Spectral line
2	20.03.2018	Continue the same topic
3	21.03.2018	Isotope effect
4	22.03.2018	Nuclear spin
5	23.03.2018	Holiday
6	24.03.2018	Continue - -
7	25.03.2018	Sunday
1	26.03.2018	Application of Spectra
2	27.03.2018	Revision

3	28.03.2018	Revision
4	29.03.2018	Holiday
	30.03.2018	Unit Test
	31.03.2018	Test Discussion
5	01.04.2018	Sunday
	02.04.2018	Introduction to IV unit
	03.04.2018	Zeeman effect
	04.04.2018	Continue
	05.04.2018	Explanation of Normal Zeeman effect.
	06.04.2018	Continue
	07.04.2018	Explanation of Anomalous Zeeman
6	08.04.2018	Sunday
	09.04.2018	Continue
	10.04.2018	Zeeman pattern of D_1 and D_2 line
	11.04.2018	Continue
	12.04.2018	Paschen Back effect of single e^-
	13.04.2018	Continue
6	14.04.2018	Holiday
7	15.04.2018	Sunday
	16.04.2018	Continue
	17.04.2018	Weak field Stark effect
3	18.04.2018	Holiday
	19.04.2018	Continue
	20.04.2018	Continue
	21.04.2018	Revision
7	22.04.2018	Sunday
	23.04.2018	Unit Test
	24.04.2018	Assignment viva given in 2nd unit
	25.04.2018	Assignment viva given in 3rd unit
	26.04.2018	Revision of 1st unit
	27.04.2018	Revision of 2nd unit
	28.04.2018	Revision of 3rd unit
7	29.04.2018	Sunday

Signature of the Teacher