LESSON PLAN FOR EVEN SEM
SESSION 2017-18

NAME OF ASSISTANT PROFESSOR : TWINKLE SHARMA
CLASS/SECTION : B.SC-IV SEM (SEC-B & SEC- C) (NON-MED)
B.SC –IV SEM (PRACTICALS)
SUBJECT : PHYSICS-(P-1) STATISTICAL PHYSICS

UNIT/PART I	TOPIC	
	THEORY	**PRACTICAL**
DAY1 DATE 1-1-18	1) Introduction 2) Basic ideas about statistics 3) Basic ideas about Probability and its types	**(B-13 Grp)** 1)To draw common base common emitter characteristics of a transistor.
DAY2 DATE 2-1-18	4) Probability Theorems 5) Some probability Considerations	**(B-13 Grp)** 1)To draw common base common emitter characteristics of a transistor.
DAY3 DATE 3-1-18	6)Tossing of 2,3 and any no. Of coins 7) Permutations and Combinations	----------
DAY4 DATE 4-1-18	----------	**(B-5 Grp)** **1)**Determination of sodium light wavelength using diffraction grating
DAY5 DATE 5-1-18	----------	**(B-10 Grp)** **1)** To measure the a) area of window ,,b) heighjt of inaccessible object
DAY6 DATE 6-1-18	----------	**(B-10 Grp)** **1)** To measure the a) area of window ,,b) heighjt of inaccessible object
DAY7 DATE 8-1-18	8) Distribution of particles in 2 Equal size compartment 9)Micro and Macrostates of a system of particles 10) Thermodynamic Probability and probability of micro and macrostates	**(B-13 Grp)** 1)To draw common base common emitter characteristics of a transistor.
DAY8 DATE 9-1-18	11)Distribution of N- particles in 2 compartments of equal size (Most Probabale and least probable macrostates)	**(B-13 Grp)** 2) Resolving power of telescope

	12)Constraints and Accessible States	
DAY9 DATE 10-1-18	13) Case with weightage 14)Most Probabale Distribution and Statistical Fluctutaion	----------
DAY10 DATE 11-1-18	----------	**(B-5 Grp)** **1)**Determination of sodium light wavelength using diffraction grating
DAY11 DATE 12-1-18	----------	**(B-10 Grp)** **1)** To measure the a) area of window ,,b) heighjt of inaccessible object
DAY12 DATE 13-1-18	----------	**(B-10 Grp)** **2)** refractive index index and dispersive power of prism
DAY13 DATE 15-1-18	15) Static and Dynamic system 16) Distribution of N-particles in K-compartments of unequal size	**(B-13 Grp)** 2) Resolving power of telescope
DAY 14 DATE 16-1-18	17) Condition of equilibrium and beta parameter	**(B-13 Grp)** 2) Resolving power of telescope
DAY15 DATE 17-1-18	18) Entropy and Probability (Boltzmann entropy relation)	----------
DAY16 DATE 18-1-18	----------	**(B-5 Grp)** **1)**Determination of sodium light wavelength using diffraction grating
DAY17 DATE 19-1-18	----------	**(B-10 Grp)** **2)** refractive index index and dispersive power of prism
DAY18 DATE 20-1-18	----------	**(B-10 Grp)** **2)** refractive index index and dispersive power of prism
DAY19 DATE 22-1-18	**HOLIDAY**	----------
DAY20 DATE 23-1-18	**SPORTS DAY**	----------
DAY21 DATE 24-1-18	**HOLIDAY**	----------
DAY22	----------	**(B-5 Grp)** 2) Wavelength of Newtons Ring

DATE 25-1-18		
DAY23 DATE 26-1-18	**HOLIDAY**	----------
DAY 24 DATE 27-1-18	----------	**(B-10 Grp)** **3)** Graph between minimum deviation and wavelength of a prism
UNIT/PART II	**TOPIC**	
	THEORY	**PRACTICAL**
DAY1 DATE 29-1-18	1)Postulates of Statistical Physics 2) Phase space Division of phase space into cells and compartments	**(B-13 Grp)** **3)**To measure the area of window and height of an inaccessible object .
DAY2 DATE 30-1-18	3)Three kinds of Statistics and their classifications 4)Basic approach in various Statistics	**(B-13 Grp)** **3)**To measure the area of window and height of an inaccessible object .
DAY3 DATE 31-1-18	**HOLIDAY**	----------
DAY4 DATE 1-2-18	----------	**(B-5 Grp)** 2) Wavelength of Newtons Ring
DAY5 DATE 2-2-18	----------	**(B-10 Grp)** **3)** Graph between minimum deviation and wavelength of a prism
DAY6 DATE 3-2-18	----------	**(B-10 Grp)** **3)** Graph between minimum deviation and wavelength of a prism
DAY7 DATE 5-2-18	5)Maxwell –Boltzmann Statistics for energy Distribution	**(B-13 Grp)** **3)**To measure the area of window and height of an inaccessible object .
DAY8 DATE 6-2-18	6)Boltzmann Distribution Law (Alpha and Beta evaluation) 7)Maxwell Boltzmann Law for energies	**(B-13 Grp)** **4)** To determine wavelength by Newtons ring
DAY9 DATE 7-2-18	8) Maxwell Boltzmann Law for speed 9)Discussion of speed distribution law and most probable speed **ASSIGNMENT 1**	----------

DAY10 DATE 8-2-18	----------	**(B-5 Grp)** 2) Wavelength of Newtons Ring
DAY11 DATE 9-2-18	----------	**(B-10 Grp)** 4) Resolving power of telescope
DAY12 DATE 10-2-18	**HOLIDAY**	**(B-10 Grp)** 4) Resolving power of telescope
DAY13 DATE 12-2-18	10) Average and Root mean square speed 11) Mean free path	**(B-13 Grp)** **4)** To determine wavelength by Newtons ring
DAY14 DATE 13-2-18	**HOLIDAY**	----------
DAY15 DATE 14-2-18	12) Maxwell –Boltzmann velocity distribution law	----------
DAY16 DATE 15-2-18	----------	**(B-5 Grp)** **3)**Focal length by nodal slide assembly
DAY17 DATE 16-2-18	----------	**(B-10 Grp)** 4) Resolving power of telescope
DAY18 DATE 17-2-18	----------	**(B-10 Grp)** 5) To study ripple factor
DAY19 DATE 19-2-18	13) Determination of mean velocity and r.m.s velocity	**(B-13 Grp)** **4)** To determine wavelength by Newtons ring
DAY20 DATE 20-2-18	14) Comparison of three statistics	**(B-13 Grp)** **5)** To determine refractive index ,Dispersive power of a prism.
DAY21 DATE 21-2-18	15) Numerical and revision of chapter -2	
DAY22 DATE 22-2-18	----------	**(B-5 Grp)** **3)**Focal length by nodal slide assembly
DAY23 DATE 23-2-18	----------	**(B-10 Grp)** 5) To study ripple factor
UNIT/PART III	**TOPIC**	
	THEORY	**PRACTICAL**
DAY1 DATE 24-2-18	----------	**(B-10 Grp)** 5) To study ripple factor
DAY2 DATE 26-2-18	1) Need for Quantum statistics 2) Bose Einstein Statistics and Bose	**(B-13 Grp)** **5)** To determine refractive index

	Einstein distribution law	,Dispersive power of a prism
DAY3 DATE 27-2-18	3)Black body radiations 4) Photon gas 5)Applications of B-E statistics to Plancks Law	**(B-13 Grp)** **5)** To draw graphs between wavelength and minimum deviation of prism.
DAY4 DATE 28-2-18	**HOLIDAY**	----------
DAY5 DATE 1-3-18	**HOLIDAY**	----------
DAY6 DATE 2-3-18	**HOLIDAY**	----------
DAY7 DATE 3-3-18	**HOLIDAY**	----------
DAY8 DATE 5-3-18	6) Bose –Einstein Gas	**(B-13 Grp)** **5)** To draw graphs between wavelength and minimum deviation of prism.
DAY9 DATE 6-3-18	7)M-B distribution as a limiting case of B-E statistics 8) Degeneracy and B-E condensation	**(B-13 Grp)** **6)**Measurement of a) specific rotation b)concentration of sugar solution using polarimeter
DAY10 DATE 7-3-18	9) Fermi Dirac distribution law	----------
DAY11 DATE 8-3-18	----------	**(B-5 Grp)** **3)**Focal length by nodal slide assembly
DAY12 DATE 9-3-18	----------	**(B-10 Grp)** 5) To study series and parallel resonant circuit
DAY13 DATE 10-3-18	----------	**(B-10 Grp)** 5) To study series and parallel resonant circuit
DAY 14 DATE 12-3-18	10) Fermi dirac gas degeneracy 11) Free electron gas	**(B-13 Grp)** **6)**Measurement of a) specific rotation b)concentration of sugar solution using polarimeter
DAY15 DATE 13-3-18	12) Fermi Dirac law of distribution of energy among free electron in a metal 13) Fermi Energy	**(B-13 Grp)** **6)**Measurement of a) specific rotation b)concentration of sugar solution using polarimeter
DAY16 DATE 14-3-18	14) Zero point energy 15) Average speed of electron gas 16) Fermi temp for electron gas	----------
DAY17	----------	**(B-5 Grp)**

DATE 15-3-18		**4)** Characteristics of common base common emmiter
DAY18 DATE 16-3-18	----------	**(B-10 Grp)** 5) To study series and parallel resonant circuit
DAY19 DATE 17-3-18	----------	**(B-10 Grp)** 6) To study meldes experiment
DAY20 DATE 19-3-18	17) electronic contribution to specific heat 18) specific heat anamoly of metals	**(B-13 Grp)** **7 (a)** to study series resonant circuit.
DAY21 DATE 20-3-18	19) M-B statistics as a special case of B-E and F-D 20) DOUBTS TAKEN	**(B-13 Grp)** **7 (a)** To study series resonant circuit.
DAY22 DATE 21-3-18	**CONDITIONAL TEST – chapter 1(Basic concepts of statistical physics)**	----------
DAY23 DATE 22-3-18	----------	**(B-5 Grp)** **4)** Characteristics of common base common emmiter
DAY 24 DATE 23-3-18	**HOLIDAY**	----------
DAY 25 DATE 24-3-18	----------	**(B-10 Grp)** 6) To study meldes experiment
UNIT/PART IV	**TOPIC**	
	THEORY	**PRACTICAL**
DAY1 DATE 26-3-18	1) Introduction of chapter and thermal properties of solids – Lattice heat	**(B-13 Grp)** **7(b)** T**o** study parallel resonant circuit .
DAY2 DATE 27-3-18	2) Specific heat of solids (at constant volume and pressure)	**(B-13 Grp)** **7(b)** T**o** study parallel resonant circuit .
DAY3 DATE 28-3-18	3) heat capacity 4) Classical theory of Lattice vibrations and heat capacity: Dulong and petit Law	----------
DAY4 DATE 29-3-18	**HOLIDAY**	----------
DAY5 DATE 30-3-18	----------	**(B-10 Grp)** 6) To study meldes experiment
DAY6 DATE 31-3-18	----------	**(B-10 Grp)** 7) Program, of even odd natural numbers

DAY7 DATE 2-4-18	5) Specific heat at low temperature and discussion of dulong petit law	**(B-13 Grp)** **8)** Program to find roots of a quadratic equation
DAY8 DATE 3-4-18	6) Einstein Theory of Lattice specific Heat of Solids	**(B-13 Grp)** **8)** Program to find roots of a quadratic equation
DAY9 DATE 4-4-18	7)Criticism or failure of Einstein Theory of specific heat	----------
DAY10 DATE 5-4-18	----------	**(B-5 Grp)** **4)** Characteristics of common base common emmiter
DAY11 DATE 6-4-18	----------	**(B-10 Grp)** 7) Program, of even odd natural numbers
DAY12 DATE 7-4-18	----------	**(B-10 Grp)** 7) Program, of even odd natural numbers
DAY13 DATE 9-4-18	8)Debye theory of Lattice Heat,(a)-Vibrational Modes of a continuous Medium 9) Debye Theory (b)- Debye Approximation	**(B-13 Grp)** **8)** Program to find roots of a quadratic equation
DAY14 DATE 10-4-18	10) Debye Theory" Special cases, and Stefans Law of Black Body Radiation 11)Success of Debye's Model	**(B-13 Grp)** **9)** To find area of triangle ,sphere,and cylinder
DAY15 DATE 11-4-18	12)Shortcomings of debye Model 13)Modification of Debye model	----------
DAY16 DATE 12-4-18	----------	**(B-5 Grp)** **5)** Max-Min range of given set of numbers
DAY17 DATE 13-4-18	----------	**(B-10 Grp)** 7) Area of Triangle,Sphere and cylinder
DAY18 DATE 14-4-18	**HOLIDAY**	----------
DAY19 DATE 16-4-18	14)Comparison of Einstein and Debye Model	**(B-13 Grp)** **9)** To find area of triangle ,sphere,and cylinder

DAY20 DATE 17-4-18	15)Revision of chapter -4	**(B-13 Grp)** **9)** To find area of triangle ,sphere,and cylinder
DAY21 DATE 18-4-18	**HOLIDAY**	----------
DAY22 DATE 19-4-18	----------	**(B-5 Grp)** **5)** Max-Min range of given set of numbers
DAY23 DATE 20-4-18	----------	**(B-10 Grp)** 8) Roots of Quadratic Equation

NAME OF ASSISTANT PROFESSOR : TWINKLE SHARMA

CLASS/SECTION : B.SC (II SEM)

SUBJECT : PHYSICS PRACTICALS

UNIT/PART I	**TOPIC**	
	THEORY	**PRACTICAL**
DAY1 DATE 1-1-18	----------	**(C-12 Grp)** 1) Moment of inertia of a flywheel
DAY2 DATE 2-1-18	----------	**(C-12 Grp)** 1) Moment of inertia of a flywheel
DAY3 DATE 3-1-18	----------	**(C-3 Grp)** 1) Moment of inertia of a torsion pendulum
DAY7 DATE 8-1-18	----------	**(C-12 Grp)** 1) Moment of inertia of a flywheel
DAY8 DATE 9-1-18	----------	**(C-12 Grp)** 2) Moment of inertia of Torsion Pendulum
DAY9 DATE 10-1-18	----------	**(C-3 Grp)** 1) Moment of inertia of a torsion pendulum
DAY13 DATE 15-1-18	----------	**(C-12 Grp)** 2) Moment of inertia of Torsion Pendulum

DAY 14 DATE 16-1-18	----------	**(C-12 Grp)** 2) Moment of inertia of Torsion Pendulum
DAY15 DATE 17-1-18	----------	**(C-3 Grp)** 1) Moment of inertia of a torsion pendulum
DAY19 DATE 22-1-18	**HOLIDAY**	----------
DAY20 DATE 23-1-18	**SPORTS DAY**	----------
DAY21 DATE 24-1-18	**HOLIDAY**	----------
DAY23 DATE 26-1-18	**HOLIDAY**	----------
UNIT/PART II	**TOPIC**	
	THEORY	**PRACTICAL**
DAY1 DATE 29-1-18	----------	**(C-12 Grp)** 3) Surface tension by jeagers's method
DAY2 DATE 30-1-18	----------	**(C-12 Grp)** 3) Surface tension by jeagers's method
DAY3 DATE 31-1-18	**HOLIDAY**	**(C-3 Grp)** 2) Young's Modulus by bending of beam
DAY7 DATE 5-2-18	----------	**(C-12 Grp)** 3) Surface tension by jeagers's method
DAY8 DATE 6-2-18	----------	**(C-12 Grp)** 4) E.C.E of hydrogen using an ammeter
DAY9 DATE 7-2-18	----------	**(C-3 Grp)** 2) Young's Modulus by bending of beam
DAY12 DATE 10-2-18	**HOLIDAY**	----------
DAY13 DATE 12-2-18	----------	**(C-12 Grp)** 4) E.C.E of hydrogen using an ammeter

DAY14 DATE 13-2-18	**HOLIDAY**	----------
DAY15 DATE 14-2-18	----------	**(C-3 Grp)** 2) Young's Modulus by bending of beam
DAY19 DATE 19-2-18	----------	**(C-12 Grp)** 4) E.C.E of hydrogen using an ammeter
DAY20 DATE 20-2-18	----------	**(C-12 Grp)** 5) zener diode voltage regulation
DAY21 DATE 21-2-18	----------	**(C-3 Grp)** 3) Viscosity of water by capiilliary tube
UNIT/PART III	**TOPIC**	
	THEORY	**PRACTICAL**
DAY1 DATE 24-2-18	----------	----------
DAY2 DATE 26-2-18	----------	**(C-12 Grp)** 5) zener diode voltage regulation
DAY3 DATE 27-2-18	----------	**(C-12 Grp)** 5) zener diode voltage regulation
DAY4 DATE 28-2-18	**HOLIDAY**	----------
DAY5 DATE 1-3-18	**HOLIDAY**	----------
DAY6 DATE 2-3-18	**HOLIDAY**	----------
DAY7 DATE 3-3-18	¤ **HOLIDAY**	----------
DAY8 DATE 5-3-18	----------	**(C-12 Grp)** 6) Inverse Square law by photocell
DAY9 DATE 6-3-18	----------	**(C-12 Grp)** 6) Inverse Square law by photocell
DAY10 DATE 7-3-18	----------	**(C-3 Grp)** 3) Viscosity of water by capiilliary tube
DAY 14		**(C-12 Grp)**

DATE 12-3-18	----------	6) Inverse Square law by photocell
DAY15 DATE 13-3-18	----------	**(C-12 Grp)** 7)A.C mains by sonometer
DAY16 DATE 14-3-18	----------	**(C-3 Grp)** 4) Frequency of A.C mains by electrical vibrator
DAY20 DATE 19-3-18	----------	**(C-12 Grp)** 7)A.C mains by sonometer
DAY21 DATE 20-3-18	----------	**(C-12 Grp)** 7)A.C mains by sonometer
DAY22 DATE 21-3-18	----------	**(C-3 Grp)** 4) Frequency of A.C mains by electrical vibrator
DAY 24 DATE 23-3-18	**HOLIDAY**	----------
UNIT/PART IV	**TOPIC**	
	THEORY	**PRACTICAL**
DAY1 DATE 26-3-18	----------	**(C-12 Grp)** 8) g by bar pendulum
DAY2 DATE 27-3-18	----------	**(C-12 Grp)** 8) g by bar pendulum
DAY3 DATE 28-3-18	----------	**(C-3 Grp)** 4) Frequency of A.C mains by electrical vibrator
DAY4 DATE 29-3-18	**HOLIDAY**	----------
DAY7 DATE 2-4-18	----------	**(C-12 Grp)** 8) g by bar pendulum
DAY8 DATE 3-4-18	----------	**(C-12 Grp)** 8) g by bar pendulum
DAY9 DATE 4-4-18	----------	**(C-3 Grp)** 5) To draw forward and reverse bias characteristics
DAY13 DATE 9-4-18	----------	**(C-12 Grp)** 9) elastic constants by Searle's Method

DAY14 DATE 10-4-18	----------	**(C-12 Grp)** 9) elastic constants by Searle's Method
DAY15 DATE 11-4-18	----------	**(C-3 Grp)** 5) To draw forward and reverse bias characteristics
DAY18 DATE 14-4-18	**HOLIDAY**	----------
DAY19 DATE 16-4-18	----------	**(C-12 Grp)** 9) elastic constants by Searle's Method
DAY20 DATE 17-4-18	----------	**(C-12 Grp)** 9) elastic constants by Searle's Method
DAY21 DATE 18-4-18	**HOLIDAY**	----------

TWINKLE SHARMA

NAME OF TEACHER