NBGSM College
Lesson Plan (July 2019- Nov 2019)

Name of Assistant Professor :	RAHUL SINGH
Class :	B.Sc (Non-Medical)
Semester:	1
Subject:	Physics Paper-1

	Day	Date	Topic
1st Week	1	16-Jul-19	Mechanics of single particle
	2	17-Jul-19	Mechanics of system of particles
	3	18-Jul-19	Conservation of laws of linear momentum
	4	19-Jul-19	Discussion related to above these topics
	5	20-Jul-19	Activity
	Sunday	21-Jul-19	
2nd Week	1	22-Jul-19	Conservation of laws of angular momentum
	2	23-Jul-19	Conservation of laws of angular momentum
	3	24-Jul-19	Conservation of laws of mechanical energy
	4	25-Jul-19	Discussion related to above these topics
	5	26-Jul-19	What is centre of mass
	6	27-Jul-19	Activity
	Sunday	28-Jul-19	
3rd week	1	29-Jul-19	What is centre of mass
	2	30-Jul-19	Equation of motion
	3	31-Jul-19	**Holiday**
	4	1-Aug-19	Equation of motion
	5	2-Aug-19	Constrained motion
	6	3-Aug-19	Activity
	Sunday	4-Aug-19	
4th week	1	5-Aug-19	Degrees of freedom
	2	6-Aug-19	Numerical problems related to unit 1
	3	7-Aug-19	Assignment related to last 5 years questions of unit 1
	4	8-Aug-19	Generalised coordinates
	5	9-Aug-19	Generalised displacement
	6	10-Aug-19	Activity
	Sunday	11-Aug-19	
5th week	1	12-Aug-19	**Holiday**
	2	13-Aug-19	Generalised velocity
	3	14-Aug-19	Generalised acceleration
	4	15-Aug-19	**Holiday**
	5	16-Aug-19	Generalised momentum
	6	17-Aug-19	Activity
	Sunday	18-Aug-19	
6th week	1	19-Aug-19	Generalised force
	2	20-Aug-19	Generalised potential
	3	21-Aug-19	Discussion related to above topics
	4	22-Aug-19	Hamilton's variational principle
	5	23-Aug-19	Lagrange's equation of motion from Hamilton's Principle
	6	24-Aug-19	**Holiday**
	Sunday	25-Aug-19	

7th week	1	26-Aug-19	Linear Harmonic oscillator
	2	27-Aug-19	Class test of Unit 1
	3	28-Aug-19	Discussion related to marks of class test of unit 1
	4	29-Aug-19	Simple pendulum
	5	30-Aug-19	Atwood's machine
	6	31-Aug-19	Activity
	Sunday	1-Sep-19	
8th week	1	2-Sep-19	Numerical related to unit 2
	2	3-Sep-19	Numerical related to unit 2
	3	4-Sep-19	Discussion related to unit 2
	4	5-Sep-19	Assignment related to last 5 years questions of unit 1
	5	6-Sep-19	Rotation of Rigid body
	6	7-Sep-19	Activity
	Sunday	8-Sep-19	
9th week	1	9-Sep-19	Moment of inertia
	2	10-Sep-19	Moment of torque
	3	11-Sep-19	Moment of angular momentum
	4	12-Sep-19	Class test of Unit 2
	5	13-Sep-19	Discussion related to marks of class test of unit 2
	6	14-Sep-19	Activity
	Sunday	15-Sep-19	
10th week	1	16-Sep-19	Kinetic energy of rotation
	2	17-Sep-19	Theorems of perpendicular axes with proof
	3	18-Sep-19	Theorems of parallel axes with proof
	4	19-Sep-19	Moment of inertia of hollow sphere
	5	20-Sep-19	Moment of inertia of spherical shell
	6	21-Sep-19	Activity
	Sunday	22-Sep-19	
11th week	1	23-Sep-19	**Holiday**
	2	24-Sep-19	Moment of inertia of solid cylinder
	3	25-Sep-19	Moment of inertia of hollow cylinder
	4	26-Sep-19	Discussion related to above topics
	5	27-Sep-19	Moment inertia solid bar of rectangular cross-section
	6	28-Sep-19	Activity
	Sunday	29-Sep-19	
12th week	1	30-Sep-19	Moment inertia solid bar of rectangular cross-section
	2	1-Oct-19	Numerical problems of unit 3
	3	2-Oct-19	**Holiday**
	4	3-Oct-19	Numerical problems of unit 3
	5	4-Oct-19	Numerical problems of unit 3
	6	5-Oct-19	Activity
	Sunday	6-Oct-19	
13th week	1	7-Oct-19	Acceleration of a body rolling down on an inclined plane
	2	8-Oct-19	**Holiday**
	3	9-Oct-19	Acceleration of a body rolling down on an inclined plane
	4	10-Oct-19	Discussion related to problems of unit 3
	5	11-Oct-19	Assignment related to last 5 years questions of unit 1
	6	12-Oct-19	Activity
	Sunday	13-Oct-19	

14th week	1	14-Oct-19	Revision of unit 1
	2	15-Oct-19	Revision of unit 1
	3	16-Oct-19	Revision of unit 1
	4	17-Oct-19	Holiday
	5	18-Oct-19	Class test of unit 3
	6	19-Oct-19	Activity
	Sunday	20-Oct-19	
15th week	1	21-Oct-19	Discussion related to marks of class test of unit 2
	2	22-Oct-19	Revision of unit 2
	3	23-Oct-19	Revision of unit 2
	4	24-Oct-19	Vacations
	5	25-Oct-19	
	6	26-Oct-19	
	Sunday	27-Oct-19	
16th week	1	28-Oct-19	Vacations
	2	29-Oct-19	
	3	30-Oct-19	
	4	31-Oct-19	Revision of unit 3
	5	1-Nov-19	Holiday
	6	2-Nov-19	Activity
	Sunday	3-Nov-19	
17th week	1	4-Nov-19	Revision of unit 3
	2	5-Nov-19	Revision of unit 3
	3	6-Nov-19	Revision of unit 3
	4	7-Nov-19	Combine class test of unit1,2 and 3
	5	8-Nov-19	Discussion related to marks of class test of unit 1,2 and 3
	6	9-Nov-19	
	Sunday	10-Nov-19	

Name of Assistant Professor :	RAHUL SINGH
Class :	B.Sc (Non-Medical)
Semester:	3
Subject:	Physics Paper-1

1st Week	Day	Date	Topic
	1	16-Jul-19	Introduction of Computer Programming
	2	17-Jul-19	Computer organisation
	3	18-Jul-19	Binary representation
	4	19-Jul-19	Algorithm development
	5	20-Jul-19	Activity
	Sunday	21-Jul-19	
2nd Week	1	22-Jul-19	Discussion on above topics
	2	23-Jul-19	Flow charts and their interpretation.
	3	24-Jul-19	interpretation of flow chart
	4	25-Jul-19	Fortran Preliminaries
	5	26-Jul-19	Integer arithmetic expression
	6	27-Jul-19	Activity
	Sunday	28-Jul-19	
3rd week	1	29-Jul-19	floating point arithmetic expression

	2	30-Jul-19	Discussion on above topics
	3	31-Jul-19	**Holiday**
	4	1-Aug-19	Built in functions executable
	5	2-Aug-19	Non-executable statements
	6	3-Aug-19	Activity
	Sunday	**4-Aug-19**	
4th week	1	5-Aug-19	Input statements
	2	6-Aug-19	Output statements
	3	7-Aug-19	Formats
	4	8-Aug-19	If statements
	5	9-Aug-19	do statements
	6	10-Aug-19	Activity
	Sunday	**11-Aug-19**	
5th week	1	12-Aug-19	**Holiday**
	2	13-Aug-19	go to statements
	3	14-Aug-19	Dimension arrays statement function
	4	15-Aug-19	**Holiday**
	5	16-Aug-19	function subprogram
	6	17-Aug-19	Activity
	Sunday	**18-Aug-19**	
6th week	1	19-Aug-19	Programme related on unit 1
	2	20-Aug-19	Programme related on unit 1
	3	21-Aug-19	Assignment related to last 5 years questions of unit 1
	4	22-Aug-19	Discussion on problems of unit 1
	5	23-Aug-19	First law of thermodynamics
	6	24-Aug-19	**Holiday**
	Sunday	**25-Aug-19**	
7th week	1	26-Aug-19	Second law of thermodynamics
	2	27-Aug-19	Carnot theorem
	3	28-Aug-19	Absolute scale of temperature
	4	29-Aug-19	Absolute Zero
	5	30-Aug-19	Entropy
	6	31-Aug-19	Activity
	Sunday	**1-Sep-19**	
8th week	1	2-Sep-19	Class test of unit 1
	2	3-Sep-19	Show that dQ/T=O
	3	4-Sep-19	T-S diagram
	4	5-Sep-19	Discussion on marks of unit 1
	5	6-Sep-19	Nernst heat law
	6	7-Sep-19	Activity
	Sunday	**8-Sep-19**	
9th week	1	9-Sep-19	Joule's free expansion
	2	10-Sep-19	Joule Thomson (Porous plug) experiment
	3	11-Sep-19	Joule - Thomson effect
	4	12-Sep-19	Liquefaction of gases
	5	13-Sep-19	Air pollution due to internal combustion engine
	6	14-Sep-19	Activity
	Sunday	**15-Sep-19**	
10th week	1	16-Sep-19	Numerical related on unit 2

	2	17-Sep-19	Numerical related on unit 2
	3	18-Sep-19	Numerical related on unit 2
	4	19-Sep-19	Assignment related to last 5 years questions of unit 2
	5	20-Sep-19	Discussion on problems of unit 2
	6	21-Sep-19	Activity
	Sunday	**22-Sep-19**	
11th week	1	23-Sep-19	**Holiday**
	2	24-Sep-19	Derivation of Clausius - Claperyron latent heat equation.
	3	25-Sep-19	Class test of unit 2
	4	26-Sep-19	Phase diagram substance
	5	27-Sep-19	Triple point of a substance
	6	28-Sep-19	Activity
	Sunday	**29-Sep-19**	
12th week	1	30-Sep-19	Discussion on marks of unit 2
	2	1-Oct-19	Development of Maxwell Thermodynamically relations
	3	2-Oct-19	**Holiday**
	4	3-Oct-19	Development of Maxwell Thermodynamically relations
	5	4-Oct-19	Application of Maxwell relations in the derivation
	6	5-Oct-19	Activity
	Sunday	**6-Oct-19**	
13th week	1	7-Oct-19	Relations between entropy
	2	8-Oct-19	**Holiday**
	3	9-Oct-19	Specific heats
	4	10-Oct-19	Thermodynamic variables
	5	11-Oct-19	Thermodynamic functions
	6	12-Oct-19	Activity
	Sunday	**13-Oct-19**	
14th week	1	14-Oct-19	Internal energy (U)
	2	15-Oct-19	Helmholtz function (F),
	3	16-Oct-19	Enthalpy(H)
	4	17-Oct-19	**Holiday**
	5	18-Oct-19	Gibbs function (G)
	6	19-Oct-19	Activity
	Sunday	**20-Oct-19**	
15th week	1	21-Oct-19	Relation between U,F,H and G
	2	22-Oct-19	Numerical based on unit 3
	3	23-Oct-19	Assignment related to last 5 years questions of unit 3
	4	24-Oct-19	**Vacations**
	5	25-Oct-19	
	6	26-Oct-19	
	Sunday	27-Oct-19	
16th week	1	28-Oct-19	**Vacations**
	2	29-Oct-19	
	3	30-Oct-19	
	4	31-Oct-19	Revision of unit 3
	5	1-Nov-19	**Holiday**
	6	2-Nov-19	Activity
	Sunday	**3-Nov-19**	
17th week	1	4-Nov-19	Revision of unit 3

		2	5-Nov-19	Revision of unit 3
		3	6-Nov-19	Revision of unit 3
		4	7-Nov-19	Combine class test of unit1,2 and 3
		5	8-Nov-19	Discussion related to marks of class test of unit 1,2 and 3
		6	9-Nov-19	
		Sunday	10-Nov-19	

Name of Assistant Professor :	RAHUL SINGH
Class :	B.Sc (Non-Medical)
Semester:	5
Subject:	Physics Paper-1

		Day	Date	Topic
1st Week		1	16-Jul-19	Introduction of Crystalline forms
		2	17-Jul-19	Introduction of glassy forms
		3	18-Jul-19	Liquid crystals
		4	19-Jul-19	Crystal structure
		5	20-Jul-19	Activity
		Sunday	21-Jul-19	
2nd Week		1	22-Jul-19	Periodicity
		2	23-Jul-19	Lattice
		3	24-Jul-19	Basis
		4	25-Jul-19	Crystal translational vectors and axes
		5	26-Jul-19	Crystal translational vectors and axes
		6	27-Jul-19	Activity
		Sunday	28-Jul-19	
3rd week		1	29-Jul-19	Discussion related to problems of above topics
		2	30-Jul-19	Unit cell
		3	31-Jul-19	**Holiday**
		4	1-Aug-19	Primitive cell
		5	2-Aug-19	Winger Seitz primitive Cell,
		6	3-Aug-19	Activity
		Sunday	4-Aug-19	
4th week		1	5-Aug-19	Symmetry operations for a two dimensional crystal
		2	6-Aug-19	Symmetry operations for a two dimensional crystal
		3	7-Aug-19	Bravais lattices in dimensions
		4	8-Aug-19	Bravais lattices in three dimensions
		5	9-Aug-19	Bravais lattices in three dimensions
		6	10-Aug-19	Activity
		Sunday	11-Aug-19	
5th week		1	12-Aug-19	**Holiday**
		2	13-Aug-19	Numerical problems of unit 1
		3	14-Aug-19	Numerical problems of unit 1
		4	15-Aug-19	**Holiday**
		5	16-Aug-19	Numerical problems of unit 1
		6	17-Aug-19	Activity
		Sunday	18-Aug-19	
6th week		1	19-Aug-19	Assignment related to last 5 years questions of unit 1
		2	20-Aug-19	Discussion related to problems of unit 1

	3	21-Aug-19	Crystal planes
	4	22-Aug-19	Miller indices
	5	23-Aug-19	Class test of unit 1
	6	24-Aug-19	**Holiday**
	Sunday	25-Aug-19	
7th week	1	26-Aug-19	Discussion on marks of unit 1
	2	27-Aug-19	Interplannar spacing
	3	28-Aug-19	Crystal structures of Zinc sulphide
	4	29-Aug-19	Sodium Chloride crystal
	5	30-Aug-19	Diamond crystal
	6	31-Aug-19	Activity
	Sunday	1-Sep-19	
8th week	1	2-Sep-19	Discussion on problems of above topics
	2	3-Sep-19	X-ray diffraction
	3	4-Sep-19	Bragg's Law
	4	5-Sep-19	Bragg's Law
	5	6-Sep-19	Experimental x-ray diffraction methods of Bragg's Law
	6	7-Sep-19	Activity
	Sunday	8-Sep-19	
9th week	1	9-Sep-19	Experimental x-ray diffraction methods of Bragg's Law
	2	10-Sep-19	Discussion on above these topics
	3	11-Sep-19	K-space
	4	12-Sep-19	Numerical problems of unit 2
	5	13-Sep-19	Numerical problems of unit 2
	6	14-Sep-19	Activity
	Sunday	15-Sep-19	
10th week	1	16-Sep-19	Assignment related to last 5 years questions of unit 1
	2	17-Sep-19	Discussion problems Unit 2
	3	18-Sep-19	Reciprocal lattice
	4	19-Sep-19	Physical significance of reciprocal lattice
	5	20-Sep-19	Reciprocal lattice vectors
	6	21-Sep-19	Activity
	Sunday	22-Sep-19	
11th week	1	23-Sep-19	**Holiday**
	2	24-Sep-19	Reciprocal lattice vectors
	3	25-Sep-19	Reciprocal lattice to a simple cubic lattice
	4	26-Sep-19	Reciprocal lattice to a simple cubic lattice
	5	27-Sep-19	B.c.c.
	6	28-Sep-19	Activity
	Sunday	29-Sep-19	
12th week	1	30-Sep-19	F.c.c.
	2	1-Oct-19	Discuss problems on above topics
	3	2-Oct-19	**Holiday**
	4	3-Oct-19	What is Specific heat?
	5	4-Oct-19	Specific heat of solids
	6	5-Oct-19	Activity
	Sunday	6-Oct-19	
13th week	1	7-Oct-19	Einstein's theory of specific heat
	2	8-Oct-19	**Holiday**

	3	9-Oct-19	Einstein's theory of specific heat
	4	10-Oct-19	Class test of unit 2
	5	11-Oct-19	Marks discussion of unit 2
	6	12-Oct-19	Activity
	Sunday	**13-Oct-19**	
14th week	1	14-Oct-19	Debye model of specific heat of solids
	2	15-Oct-19	Debye model of specific heat of solids
	3	16-Oct-19	Numerical problems of unit 3
	4	17-Oct-19	**Holiday**
	5	18-Oct-19	Numerical problems of unit 3
	6	19-Oct-19	Activity
	Sunday	**20-Oct-19**	
15th week	1	21-Oct-19	Discussion problems Unit 3
	2	22-Oct-19	Discussion problems Unit 3
	3	23-Oct-19	Revision of unit 3
	4	24-Oct-19	**Vacations**
	5	25-Oct-19	
	6	26-Oct-19	
	Sunday	27-Oct-19	
16th week	1	28-Oct-19	**Vacations**
	2	29-Oct-19	
	3	30-Oct-19	
	4	31-Oct-19	Class test of unit 3
	5	1-Nov-19	**Holiday**
	6	2-Nov-19	Activity
	Sunday	**3-Nov-19**	
17th week	1	4-Nov-19	Revision of unit 3
	2	5-Nov-19	Revision of unit 3
	3	6-Nov-19	Revision of unit 3
	4	7-Nov-19	Combine class test of unit1,2 and 3
	5	8-Nov-19	Discussion related to marks of class test of unit 1,2 and 3
	6	9-Nov-19	
	Sunday	**10-Nov-19**	