



RPS Degree College, Balana (Mahendergarh)

Lesson Plan

2019-20 (Even Semester)

Class and Section: B.Sc NM 2nd Semester Section B

Subject: Basic Computer-I

Name of the Faculty :Ms Sapna

Week	Lecture	Date	Topics
1	1	16 Jan to 24 Jan	Computer Definition, Characteristics, Application, Components of computers, System I/O devices
2	1	27 Jan to 31 Jan	Concept of M/M, Magnetic & Optical storage devices
3	1	3 Feb to 7 Feb	Operating System Windows, Definition & function of OS, Basic Component of windows
4	1	10 Feb to 14 Feb	(LAB) Exploring Computer, Icons, taskbar, Desktop, managing files and folders, Control panel, Display properties,
5	1	17 Feb to 21 Feb	(LAB) Add/Remove S/W & H/W setting, Date & time, Screen Saver & Appearance
6			1st sessional
7	1	24 Feb to 28 Feb	(LAB) Word Processing , introduction to word processing, Meuns, Creating, editing & formatting document
8	1	2 Mar to 6 Mar	(LAB) Spell Checking, Printing, Views, Table, Word Art
9	1	9 Mar to 13 Mar	(LAB) Mail merge Macros
10	1	16 Mar to 20 Mar	Computer Communcation, Internet & its application.
11	1	23 Mar to 27 Mar	(LAB) Surfing the internet using web browser
12			2nd sessional
13	0	30 Mar to 3 April	No Lect
14	1	6 Apr to 10 Apr	(LAB) Creating Email ID, Viewing an e-mail, Sending an E-Mail to single and Multiple, Sending a file as an attachment
15	1	13 Apr to 17 Apr	Revision
16			Final sessional



RPS Degree College, Balana (Mahendergarh)

Lesson Plan

2019-20(Even Semester)

Class and Section: NM 2nd A

Subject : English

Name of Faculty: Mr. Sushil kumar

Week	Lecture	Date	Topics
	1	16-Jan-20	Introduction to Syllabus, Scheme of Exam & Learning Objectives/Outcomes
	2		
	3	23-Jan-20	Translation from Hindi to English
	4	30-Jan-20	Essay 1 complete
	5	06-Feb-20	Doubt session and essay 2 complete
	6	13-Feb-20	Introduction to Precis writing
	7	20-Feb-20	UT1
	8	27-Feb-20	Essay 3 complete
	9	05-Mar-20	Doubt and Essay 4 complete
	10	12-Mar-20	Doubt and Essay 5 complete
	11	19-Mar-20	Doubt and Essay 6 complete
	12	26-Mar-20	UT2
	13	02-Apr-20	Precis writing
	14	09-Apr-20	Letter writing
	15	16-Apr-20	Revision
	20th - 24th April 20		Final Sessional Test



RPS Degree College, Balana (Mahendergarh)

Subject: Inorganic chemistry

Name of the Faculty : MR. AMIT KUMAR

Week	Lecture	Date	Topics
1	1	23-Jan-20	Introduction of syllabus.
	2	24-Jan-20	Hydrogen Bonding – Definition, Types, effects of hydrogen bonding on properties of substances
2	3,4	30/1/20-31/1/20	Brief discussion of various types of Vander Waals Forces
3	5	06-Feb-20	Metallic Bond- Brief introduction to metallic bond, band theory of metallic bond
	6	07-Feb-20	Semiconductors- Introduction, types and applications
4	7	13-Feb-20	s-Block Elements Comparative study of the elements including , diagonal relationships, salient features of hydrides
	8	14-Feb-20	solvation and complexation tendencies including their function in biosystems
5	9	20-Feb-20	Chemical properties of the noble gases with emphasis on their low chemical reactivity,
	10	21-Feb-20	HOLIDAY.
6	11,12	24/2/20-28/2/20	1st Class Test
7	13	05-Mar-20	chemistry of xenon, structure and bonding of fluorides, oxides & oxyfluorides of xenon.
	14	06-Mar-20	Emphasis on comparative study of properties of p-block elements
8	15	12-Mar-20	Diborane – properties and structure (as an example of electron – deficient compound and multicentre bonding), Borazene – chemical properties and structure Trihalides of Boron
	16	13-Mar-20	HOLIDAY.
9	17	19-Mar-20	Catenation, p π - d π bonding (an idea), carbides, fluorocarbons, silicates
	18	20-Mar-20	silicons – general methods of preparations, properties and uses
10	19,20,	23/3/20- 27/3/20	2nd Class Test
11	21	02-Apr-20	HOLIDAY.
	22	03-Apr-20	Oxides – structures of oxides of N,P, oxyacids – structure and relative acid strengths of oxyacids of Nitrogen and phosphorus
12	23	09-Apr-20	Oxyacids of sulphur – structures and acidic strength H ₂ O ₂ –structure, properties
	24	10-Apr-20	Basic properties of halogen, interhalogens types properties
13	25	16-Apr-20	hydro and oxyacids of chlorine – structure and comparison of acid strength .
	26	17-Apr-20	revision of syllabus.
			Final Sessional Test

**RPS Degree College, Balana (Mahendergarh)****Class and Section: B.Sc(N,M) 2nd semester section A and D****Subject: Number Theory And Trigonometry****Name of the Faculty :Mr. Manjeet**

Week	Lecture	Date	Topics
1	7	16/01/20 to 24/01/20	Divisibility, G.C.D. and L.C.M., Primes
2	5	27/01/20 to 31/01/20	Fundamental Theorem, Linear Congruence
3	5	03/02/20 to 07/02/20	Fermat's, Wilson Theorems and converse,
4	5	10/02/20 to 14/02/20	CRS and RRS system modulo m, Euler phi function with problems
5	5	17/02/20 to 21/02/20	Chinese Remainder theorem, Quadratic residue
6	1st Class Test		
7	5	24/02/20 to 28/02/20	Legendres symbol, Gauss Reciprocity Law
8	5	02/03/20 to 06/03/20	The function $d(n)$, $\sigma(n)$, Moebius function and formula
9	5	09/03/20 to 13/03/20	De-Moivres theorem and problems
10	2nd Class Test		
11	5	16/03/20 to 20/03/20	Expansion of trigonometric functions
12	5	23/03/20 to 27/03/20	Direct circular and Hyperbolic functions
13	5	06/04/20 to 10/04/20	Inverse circular and Hyperbolic functions
14	5	30/03/20 to 03/04/20	Hyperbolic functions properties, Logarithm of a Complex quantity
15	5	13/04/20 to 17/04/20	Gregory's series, Summation of Trigonometric series
16	Final Sessional Test		

RPS Degree College, Balana (Mahendergarh)			
Lesson Plan			
2020-21 (Even Semester)			
Class and Section: Non Medical 2nd sem			
Subject: Ordinary differential equations			
Name of the Faculty : Ajay			
Week	Lecture	Date	Topics
1	7	16/01/20 to 24/01/20	Geometrical meaning of a differential equation. Exact differential equations, integrating factors.
2	5	27/01/20 to 31/01/20	First order higher degree equations solvable for x,y,p Lagrange's equations,
3	5	03/02/20 to 07/02/20	Clairaut's equations. Equation reducible to Clairaut's form. Singular solutions.
4	5	10/02/20 to 14/02/20	Orthogonal trajectories: in Cartesian coordinates and polar coordinates. Self orthogonal family of curves..
5	5	17/02/20 to 21/02/20	Linear differential equations with constant coefficients.
6	1st Class Test		
7	5	24/02/20 to 28/02/20	Homogeneous linear ordinary differential equations. Equations reducible to homogeneous
8	5	02/03/20 to 06/03/20	Linear differential equations of second order: Reduction to normal form. Transformation of the equation by changing the dependent variable/ the independent variable.
9	5	09/03/20 to 13/03/20	Solution by operators of non-homogeneous linear differential equations.
10	2nd Class Test		
11	5	16/03/20 to 20/03/20	Reduction of order of a differential equation. Method of variations of parameters. Method of undetermined coefficients.
12	5	23/03/20 to 27/03/20	Ordinary simultaneous differential equations. Solution of simultaneous differential equations involving operators $x (d/dx)$ or $t (d/dt)$ etc.
13	5	06/04/20 to 10/04/20	Simultaneous equation of the form $dx/P = dy/Q = dz/R$. Total differential equations.
14	5	30/03/20 to 03/04/20	Condition for $Pdx + Qdy + Rdz = 0$ to be exact. General method of solving $Pdx + Qdy + Rdz = 0$ by taking one variable constant. Method of auxiliary equations.
15	5	13/04/20 to 17/04/20	Assignment of whole syllabus
16	Final Sessional Test		





RPS Degree College, Balana (Mahendergarh)

Lesson Plan

2019-20(Even Semester)

Class and Section: B.Sc. NM 2A

Subject: VECTOR CALCULUS

Name of the Faculty : vikash kumar

Week	Lecture	Date	Topics
1	1	16-Jan-20	Subject History & Progress
2	2	21-Jan-20	Introduction to Syllabus, Scheme of Exam & Learning Objectives/Outcomes
	3	22-Jan-20	Test to Check the Learning Level of the Students
	4	23-Jan-20	Scalar and vector product of three vectors
3	5	28-Jan-20	Product of four vectors
	6	29-Jan-20	Reciprocal vectors
	7	30-Jan-20	Vector differentiation
4	8	04-Feb-20	Scalar Valued point functions
	9	05-Feb-20	Vector valued point functions
	10	06-Feb-20	Derivative along a curve
5	11	11-Feb-20	Directional derivatives
	12	12-Feb-20	
	13	13-Feb-20	Gradient of a scalar point function
6	14	18-Feb-20	Geometrical interpretation of grad
	15	19-Feb-20	Test
	16	20-Feb-20	Character of gradient as a point function
7	17	25-Feb-20	Divergence and curl of vector point function
	18	26-Feb-20	
	19	27-Feb-20	Characters of Div and Curl as point function
8	20	03-Mar-20	Gradient, divergence and curl of sums and product and their related vector identities
	21	04-Mar-20	
	22	05-Mar-20	their related vector identities
9	23	11-Mar-20	Orthogonal curvilinear coordinates
	24	12-Mar-20	Conditions for orthogonality fundamental triad of mutually orthogonal unit vectors
10	25	17-Mar-20	
	26	18-Mar-20	Gradient, Divergence, Curl and Laplacian operators in terms of Orthogonal curvilinear coordinates
	27	19-Mar-20	
11	28	24-Mar-20	Cylindrical co-ordinates and Spherical co-ordinates
	29	25-Mar-20	Test
	30	26-Mar-20	Vector integration; Line integral
12	31	31-Mar-20	Surface integral
	32	01-Apr-20	Volume integral
13	33	07-Apr-20	Theorems of Gauss
	34	08-Apr-20	Green Theorem and problems based on this theorem
	35	09-Apr-20	Stokes Theorem and problems based on this theorms
14	36	14-Apr-20	Revision
	37	15-Apr-20	revision and test
	38	16-Apr-20	Revision
15	20th - 24th April 20		Final Sessional Test

RPS Degree College, Balana (Mahendergarh)			
Class and Section: B.Sc(N.M.) 2nd semester (B,D)			
Subject: Ordinary Differential Equation			
Name of the Faculty : Mr. Rohit			
Week	Lecture	Date	Topics
1	7	16/01/20 to 24/01/20	Basics of differential equation, Solution of exact differential equation, Integrating Factor
2	5	27/01/20 to 31/01/20	First order higher degree equation solvable for x,y,p and Lagranges equation, Clairauts equation
3	5	03/02/20 to 07/02/20	Orthogonal trajectory in Cartesian and polar coordinates, Linear differential equation with constant coefficients
4	5	10/02/20 to 14/02/20	Homogeneous linear ordinary differential equation,
5	5	17/02/20 to 21/02/20	Equation reducible to Homogeneous equation and then find solution of differential equation
6			1st Class Test
			Linear differential equation of second order, Reducible to Normal

14	5	30/03/20 to 03/04/20	Total differential equation, Condition for $Pdx+Qdy+Rdz=0$ by taking one variable constant				
15	5	13/04/20 to 17/04/20	Method of auxiliary equations				
16			Final Sessional Test				



RPS Degree College, Balana (Mahendergarh)

Lesson Plan

2019-20 (Even Semester)

Class and Section: Non Med- A,C 2nd semester

Subject: Basic Computer Education

Name of the Faculty : Ms. Meenakshi

Week	Lecture	Date	Topics
1	1	17-Jan-20	Computer Definition, characteristics, Applications, Components of computer system, Input/Output Devices
2	1	31-Jan-20	Concept of memory, magnetic and optical storage devices.
3	1	07-Feb-20	Definition & functions of Windows operating system , Basic Components of windows, exploring computer , icons.
4	1	14-Feb-20	Taskbar, desktop, managing files and folders, Control panel- display properties (Assignment given)
5	1		ClassTest1
6	1	28-Feb-20	Add/remove software and hardware , setting date and time , screen saver and appearance
7	1	07-Mar-20	Introduction to word processing , menus, creating , editing and formatting document
8	1	14-Mar-20	spell checking, printing, views, tables, wordart, mail merge, macros
9	1	21-Mar-20	Computer communication internet and its application, surfing the internet using webbrowser
10	1		Class Test2
11	1	03-Apr-20	sending a file as an attachment
12	1	10-Apr-20	Revision
13	1	17-Apr-20	Revision
14			Final Sessional Test
15			



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RPS Degree College, Balana (Mahendergarh)

2019-20 (Even

Semester)

Class and Section: B.Sc.(NM) 2nd A

Subject: Organic chemistry

Name of the Faculty : Hitesh Yadav

Week	Lecture	Date	Topics
1	1	20-Jan-20	.Alkenes Nomenclature of alkenes,
	2	21-Jan-20	mechanisms of dehydration of alcohols and dehydrohalogenation of alkyl halides
2	3	27-Jan-20	mechanisms of dehydration of alcohols and dehydrohalogenation of alkyl halides
	4	28-Jan-20	Chemical reactions of alkenes mechanisms involved in hydrogenation
3	5	03-Feb-20	electrophilic and free radical additions, Markownikoff's rule, hydroboration-oxidation
	6	04-Feb-20	oxymercuration-reduction, ozonolysis, hydration, hydroxylation and oxidation with KMnO ₄
4	7	10-Feb-20	Arenes and Aromaticity Nomenclature of benzene derivatives: Aromatic nucleus and side chain.
	8	11-Feb-20	Aromaticity: the Huckel rule, aromatic ions, annulenes up to 10 carbon atoms, aromatic, anti - aromatic and non - aromatic compounds
5	9	17-Feb-20	Aromatic electrophilic substitution general pattern of the mechanism, mechanism of nitration, halogenation, sulphonation
	10	18-Feb-20	Friedel-Crafts reaction. Energy profile diagrams. Activating, deactivating substituents and orientation
6	11,12		1st Class Test
7	13	02-Mar-20	Chemical reactions 1,2 and 1,4 additions (Electrophilic & free radical mechanism)
	14	03-Mar-20	Diels-Alder reaction, Nomenclature, structure and bonding in alkynes
8	15	09-Mar-20	Methods of formation. Chemical reactions of alkynes, acidity of alkynes
9	17	16-Mar-20	Nomenclature and classes of alkyl halides
	18	17-Mar-20	methods of formation, chemical reactions.
10	19,20		2nd Class Test
11	21	30-Mar-20	Mechanisms and stereochemistry of nucleophilic substitution reactions of alkyl halides
	22	31-Mar-20	SN ₂ and SN ₁ reactions with energy profile diagrams
12	23	06-Apr-20	Methods of formation and reactions of aryl halides
	24	07-Apr-20	The addition-elimination and the elimination-addition mechanisms of nucleophilic aromatic substitution reactions
13	25	13-Apr-20	Relative reactivities of alkyl halides vs allyl, vinyl and aryl halides.
	26	14-Apr-20	Revision of section A
14			Final Sessional Test
15			Special Class
			Special Class
16			Final Exam
17			

Lesson Plan

Name of the Assistant/ Associate Professor - Dr.Rajni Bansal

Class and Section: B.sc 2nd sem B and D (N.M)

Subject: Properties of Matters, Kinetic
Theory and Relativity

Sub. Code - Phy-201

Week	Date	Topics
1	Day1	Introduction to syllabus
	Day2	Unit I Properties of Matter (Elasticity)
	Day3	Elasticity, Hooke's law
2	Day4	Elastic constants and their relations
	Day5	continue..
	Day6	Poisson's ratio
3	Day7	torsion of cylinder and twisting couple
	Day8	continue....
	Day9	Bending of beam (bending moment and its magnitude) cantilevers
4	Day10	continue...
	Day11	Numerical problem discussion
5	Day12	Centrally loaded beam
	Day13	continue....
	Day14	Assignment 1
6	Day15	Numerical Problem discussion
	Day16	last year question paper discussion
	Day17	Unit I revision
7	Day18	Unit I Test
	Day19	Unit I Test discussion.
8	Day20	Unit II Kinetic Theory of Gases
	Day21	:Assumptions of Kinetic Theory of gases
	Day22	continue..
Week	Date	Topics
9	Day23	Law of equipartition of energy and its applications for specific heats of gases

	Day24	continue..
	Day25	Maxwell distribution of speeds and velocities (derivation required)
10	Day26	continue...
	Day27	Experiomental verification of Maxwell's Law of speed distribution
	Day28	continue..
11	Day29	most probable speed, average and r.m.s. speed
	Day30	mean free path
	Day31	Transport of energy and momentum
12	Day32	continue..
	Day33	diffusion of gases
	Day34	Brownian motion (qualitative)
13	Day35	Real gases, Van der Waal's equation
	Day36	Numerical problem discussion
	Day37	Unit- II test
14	Day38	Unit III Theory of Relativity
	Day39	Reference systems
	Day40	inertial frames
15	Day41	Gallilean invariance and Conservation laws
	Day42	Newtonian relativity principle
	Day43	Michelson - Morley experiment : Search for ether
16	Day44	Lorentz transformations length contraction, time dilation
	Day45	velocity addition theorem
	Day46	variation of mass with velocity and mass energy equivalence
17	Day47	Unit III revision & previous year question paper discussion
	Day48	Unit III Test
	Day49	Syllabus complete

Lesson Plan

Name of the Assistant/ Associate Professor - Mrs. NISHA

Class and Section: B.sc 2nd sem (N.M) A and C

Subject: Subject: Properties of Matters, Kinetic Theory and Relativity

Sub. Code - Phy-201

Week	Date	Topics
1	Day1	Introduction to syllabus
	Day2	Unit I Properties of Matter (Elasticity)
	Day3	Elasticity, Hooke's law
2	Day4	Elastic constants and their relations
	Day5	continue..
	Day6	Poisson's ratio
3	Day7	torsion of cylinder and twisting couple
	Day8	continue....
	Day9	Bending of beam (bending moment and its magnitude) cantilevers
	Day10	continue...
	Day11	Numerical problem discussion
4	Day12	Centrally loaded beam
	Day13	continue....
	Day14	Assignment 1
5	Day15	Numerical Problem discussion
	Day16	last year question paper discussion
	Day17	Unit I revision
6	Day18	Unit I Test
	Day19	Unit I Test discussion.
7	Day20	Unit II Kinetic Theory of Gases
	Day21	:Assumptions of Kinetic Theory of gases
	Day22	continue..
8	Day23	Law of equipartition of energy and its applications for specific heats of gases
	Day24	continue..
	Day25	Maxwell distribution of speeds and velocities (derivation required)
9	Day26	continue...
	Day27	Experiomental verification of Maxwell's Law of speed distribution

	Day28	continue..
10	Day29	most probable speed, average and r.m.s. speed
	Day30	mean free path
	Day31	Transport of energy and momentum
11	Day32	continue..
	Day33	diffusion of gases
	Day34	Brownian motion (qualitative)
12	Day35	Real gases, Van der Waal's equation
	Day36	Numerical problem discussion
	Day37	Unit- II test
13	Day38	Unit III Theory of Relativity
	Day39	Reference systems
	Day40	inertial frames
14	Day41	Gallilean invariance and Conservation laws
	Day42	Newtonian relativity principle
	Day43	Michelson - Morley experiment : Search for ether
15	Day44	Lorentz transformations length contraction, time dilation
	Day45	velocity addition theorem
	Day46	variation of mass with velocity and mass energy equivalence
16	Day47	Unit III revision & previous year question paper discussion
	Day48	Unit III Test
	Day49	Syllabus complete

Lesson plan

Name of the Assistant Professor: Mr. Manjeet Kumar

Class and Section: B.sc 2nd sem. (N.M.), Sec –A, B, C, D

Subject: Electro-magnetic Induction and Electronic Devices

Sub Code – PHY 202

Week	Days	Topics
1	Day1	Introduction
	Day2	Growth and decay of current in a circuit with (a) Capacitance and resistance
	Day3	Growth and decay of current in a circuit with (a) Capacitance and resistance
2	Day4	(b) resistance and inductance
	Day5	(c) Capacitance and inductance
	Day6	(d) Capacitance resistance and inductance.
3	Day7	(d) Capacitance resistance and inductance.
	Day8	Numerical problems
	Day9	Numerical problems & assignment 1
4	Day10	Doubts
	Day11	AC circuit analysis using complex variables with (a) capacitance and resistance
	Day12	(b) resistance and inductance
5	Day13	(c) capacitance and inductance
	Day14	(d) capacitance, inductance and resistance Series and parallel resonant circuit.
	Day15	(d) capacitance, inductance and resistance Series and parallel resonant circuit.
6	Day16	Quality factor (Sharpness of resonance).
	Day17	Doubts of unit 1 & assignments 2
	Day18	Class test 1
7	Day19	Energy bands in solids
	Day20	Intrinsic and extrinsic semiconductor, Hall effect,
	Day21	P-N junction diode and their V-I characteristics. Zener and avalanche breakdown.

8	Day22	Resistance of a diode, Light Emitting diodes (LED). Photo conduction in semiconductors
	Day23	photodiode, Solar Cell.
	Day24	P-N junction half wave and full wave rectifier
9	Day25	Types of filter circuits (L and - with theory)
	Day26	Zener diode as voltage regulator, simple regulated power supply
	Day27	Numerical problems & assignment 3
10	Day28	Junction Transistors, Bipolar transistors, working of NPN and PNP transistors
	Day29	Transistor connections (C-B, C-E, C-C mode), constants of transistor
	Day30	Transistor characteristic curves (excluding h parameter analysis), advantage of C-B configuration.
11	Day31	C.R. O. (Principle, construction and working in detail) ...
	Day32	Numerical problems & assignment 4
	Day33	Doubts
12	Day34	Class test 2
	Day35	Transistor Amplifiers: Transistor biasing, methods of Transistor biasing and stabilization.
	Day36	methods of Transistor biasing and stabilization. D.C. load line
13	Day37	Common-base and common-emitter transistor biasing
	Day38	Common-base, common- emitter amplifiers
	Day39	Classification of amplifiers
14	Day40	Resistance-capacitance (R-C) coupled amplifier
	Day41	Feed-back in amplifiers, advantage of negative feedback Emitter follower.
	Day42	Oscillators: Oscillators, Principle of Oscillation, Classification of Oscillator
15	Day43	Condition for self-sustained oscillation
	Day44	Barkhausen Criterion for oscillations. Tuned collector common emitter oscillator
	Day45	Hartley oscillator.
16	Day 46	Colpitt's oscillator
	Day47	Doubts
	Day48	Numerical problems & assignment 5
17	Day49	Syllabus complete
	Day50	Doubts from Units
	Day51	Revisions



RPS Degree College, Balana (Mahendergarh)

Lesson Plan

2019-20(Even Semester)

Class and Section: NM 2nd B [BSc.]

Subject:English

Name of Faculty: Mr Sushil kumar

Week	Lecture	Date	Topics
	1	22-Jan-20	Introduction to syllabus
	2	24-Jan-20	Essay 1 half complete
	3	29-Jan-20	Essay 1 complete
	4	31-Jan-20	Basics of translation
	5	05-Feb-20	Essay 2 half complete
	6	07-Feb-20	Essay 2 complete
	7	12-Feb-20	Doubt session
	8	14-Feb-20	Testing students understanding
	9	19-Feb-20	UT1
	10	26-Feb-20	Essay 3 half complete
	11	28-Feb-20	Essay 3 complete
	12	04-Mar-20	Essay 4 half complete
	13	06-Mar-20	Essay 4 complete
	14		Introduction to precis writing
	15	13-Mar-20	Doubt session
	16	18-Mar-20	Essay 5 half complete
	17	20-Mar-20	Essay 5 complete
	18	25-Mar-20	UT2
	19	27-Mar-20	Paper discussion
	20	01-Apr-20	Essay 6 half complete
	21	03-Apr-20	Essay 6 complete
	22	08-Apr-20	Letter writing
	23	10-Apr-20	Revision
	24	15-Apr-20	Revision
	25	17-Apr-20	Revision
	20th - 24th April 20		Final Sessional Test



RPS Degree College, Balana (Mahendergarh)

Lesson Plan

2019-20 (Even Semester)

Class and Section: B.Sc NM 2nd Semester Section B

Subject: Basic Computer-I

Name of the Faculty :Ms Sapna

Week	Lecture	Date	Topics
1	1	16 Jan to 24 Jan	Computer Definition, Characteristics, Application, Components of computers, System I/O devices
2	1	27 Jan to 31 Jan	Concept of M/M, Magnetic & Optical storage devices
3	1	3 Feb to 7 Feb	Operating System Windows, Definition & function of OS, Basic Component of windows
4	1	10 Feb to 14 Feb	(LAB) Exploring Computer, Icons, taskbar, Desktop, managing files and folders, Control panel, Display properties,
5	1	17 Feb to 21 Feb	(LAB) Add/Remove S/W & H/W setting, Date & time, Screen Saver & Appearance
6			1st sessional
7	1	24 Feb to 28 Feb	(LAB) Word Processing , introduction to word processing, Meuns, Creating, editing & formatting document
8	1	2 Mar to 6 Mar	(LAB) Spell Checking, Printing, Views, Table, Word Art
9	1	9 Mar to 13 Mar	(LAB) Mail merge Macros
10	1	16 Mar to 20 Mar	Computer Communcation, Internet & its application.
11	1	23 Mar to 27 Mar	(LAB) Surfing the internet using web browser
12			2nd sessional
13	0	30 Mar to 3 April	No Lect
14	1	6 Apr to 10 Apr	(LAB) Creating Email ID, Viewing an e-mail, Sending an E-Mail to single and Multiple, Sending a file as an attachment
15	1	13 Apr to 17 Apr	Revision
16			Final sessional



Plan

RPS Degree College, Balana (Mahendergarh)

2019-20 (Even

Semester)

Class and Section: B.Sc.(NM) 2nd B

Subject: Organic chemistry

Name of the Faculty : Hitesh Yadav

Week	Lecture	Date	Topics
1	1	16-Jan-20	Alkenes Nomenclature of alkenes,
	2	17-Jan-20	mechanisms of dehydration of alcohols and dehydrohalogenation of alkyl halides
2	3	23-Jan-20	mechanisms of dehydration of alcohols and dehydrohalogenation of alkyl halides
	4	24-Jan-20	Chemical reactions of alkenes mechanisms involved in hydrogenation
3	5	30-Jan-20	electrophilic and free radical additions, Markownikoff's rule, hydroboration-oxidation
	6	31-Jan-20	oxymercuration-reduction, ozonolysis, hydration, hydroxylation and oxidation with KMnO ₄
4	7	06-Feb-20	Arenes and Aromaticity Nomenclature of benzene derivatives: Aromatic nucleus and side chain.
	8	07-Feb-20	Aromaticity: the Huckel rule, aromatic ions, annulenes up to 10 carbon atoms, aromatic, anti - aromatic and non - aromatic compounds
5	9	13-Feb-20	Aromatic electrophilic substitution general pattern of the mechanism, mechanism of nitration, halogenation, sulphonation
	10	14-Feb-20	Friedel-Crafts reaction. Energy profile diagrams. Activating, deactivating substituents and orientation
6	11,12		1st Class Test
7	13	27-Feb-20	Chemical reactions 1,2 and 1,4 additions (Electrophilic & free radical mechanism)
	14	28-Feb-20	Diels-Alder reaction, Nomenclature, structure and bonding in alkynes
8	15	05-Mar-20	Methods of formation. Chemical reactions of alkynes, acidity of alkynes
9	17	06-Mar-20	Nomenclature and classes of alkyl halides
	18	12-Mar-20	methods of formation, chemical reactions.
10	19,20		2nd Class Test
11	21	26-Mar-20	Mechanisms and stereochemistry of nucleophilic substitution reactions of alkyl halides
	22	27-Mar-20	SN ₂ and SN ₁ reactions with energy profile diagrams
12	23	02-Apr-20	Methods of formation and reactions of aryl halides
	24	03-Apr-20	The addition-elimination and the elimination-addition mechanisms of nucleophilic aromatic substitution reactions
13	25	09-Apr-20	Relative reactivities of alkyl halides vs allyl, vinyl and aryl halides.
	26	10-Apr-20	Revision of section A
14			Final Sessional Test
15			Special Class
			Special Class
16			Final Exam
17			



Class and Section: B.Sc.(NON MED) 2nd C

Subject: Organic chemistry

Name of the Faculty : MUHAMMAD MUSTAFA

Week	Lecture	Date	Topics
1	1	20-Jan-20	Alkenes Nomenclature of alkenes,
	2	22-Jan-20	mechanisms of dehydration of alcohols and dehydrohalogenation of alkyl halides
2	3	27-Jan-20	mechanisms of dehydration of alcohols and dehydrohalogenation of alkyl halides
	4	29-Jan-20	Chemical reactions of alkenes mechanisms involved in hydrogenation
3	5	03-Feb-20	electrophilic and free radical additions, Markownikoff's rule, hydroboration-oxidation
	6	05-Feb-20	oxymercuration-reduction, ozonolysis, hydration, hydroxylation and oxidation with KMnO ₄
4	7	10-Feb-20	Arenes and Aromaticity Nomenclature of benzene derivatives: Aromatic nucleus and side chain.
	8	12-Feb-20	Aromaticity: the Huckel rule, aromatic ions, annulenes up to 10 carbon atoms, aromatic, anti-aromatic and non-aromatic compounds
5	9	17-Feb-20	Aromatic electrophilic substitution general pattern of the mechanism, mechanism of nitration, halogenation, sulphonation
	10	19-Feb-20	Friedel-Crafts reaction. Energy profile diagrams. Activating, deactivating substituents and orientation
6	11,12		1st Class Test
7	13	02-Mar-20	Chemical reactions 1,2 and 1,4 additions (Electrophilic & free radical mechanism)
	14	04-Mar-20	Diels-Alder reaction, Nomenclature, structure and bonding in alkynes
8	15	09-Mar-20	Methods of formation. Chemical reactions of alkynes, acidity of alkynes
9	17	16-Mar-20	Nomenclature and classes of alkyl halides
	18	18-Mar-20	methods of formation, chemical reactions.
10	19,20		2nd Class Test
11	21	30-Mar-20	Mechanisms and stereochemistry of nucleophilic substitution reactions of alkyl halides
	22	01-Apr-20	SN ₂ and SN ₁ reactions with energy profile diagrams
12	23	06-Apr-20	Methods of formation and reactions of aryl halides
	24	08-Apr-20	The addition-elimination and the elimination-addition mechanisms of nucleophilic aromatic substitution reactions
13	25	13-Apr-20	Relative reactivities of alkyl halides vs allyl, vinyl and aryl halides.
	26	15-Apr-20	Revision of section A
14			Final Sessional Test
15			Special Class
			Special Class
16			Final Exam
17			



RPS Degree College, Balana (Mahendergarh)

Lesson Plan for even semester(2019-2020).

Class and Section: B.sc NM 2nd sem 'C'

Subject: Physical chemistry

Name of the Faculty : Kiran yadav

Week	Lecture	Date	Topics
1	1	23-Jan-20	Introduction of syllabus.
	2	24-Jan-20	Sec-A: Kinetics-1: rate of reaction,rate equation.
2	3,4	30/1/20-31/1/20	effect of temp.,concentration,pressure,solvent,light,catalyst.
3	5	06-Feb-20	order of reaction,integrated rate expression for zero order,ist order.
	6	07-Feb-20	integrated rate equation for second and third order reaction.
4	7	13-Feb-20	half life period of a reaction,methods of determination of order of reaction.
	8	14-Feb-20	Sec-B: Kinetics -2: effect of temperature on the rate of reaction-Arrhenius equation,simple collision theory for unimolecular and bimolecular collision.
5	9	20-Feb-20	transition state theory of bimolecular reaction.
	10	21-Feb-20	HOLIDAY.
6	11,12	24/2/20-28/2/20	1st Class Test
7	13	05-Mar-20	Sec:C-Electrochemistry-1: electrolytic conduction, factors affecting electrolytic conduction.
	14	06-Mar-20	specific conductance,molar conductance,equivalent conductance and relation among them,their variation with concentration.
8	15	12-Mar-20	Arrhenius theory of ionization,Ostwald's Dilution law.
	16	13-Mar-20	HOLIDAY.
9	17	19-Mar-20	Debye- Huckel -Onsager's equation for strong electrolytes(elementry treatment only).
	18	20-Jan-00	transport no.,definition and determination by Hittorf's methods(numericals included).
10	19,20.	23/3/20- 27/3/20	2nd Class Test
11	21	02-Apr-20	HOLIDAY.
	22	03-Apr-20	Sec-D: Kohlrausch law,effect of temp,pressure,concentration on it,application of kohlrausch's law in calculation of weak electrolytes at infinite dilution.
12	23	09-Apr-20	application of conductivity measurement: determination of degree of dissociation,determination of Ka of acids,determination of solubility product of sparingly soluble salts.
	24	10-Apr-20	conductometric titrations,definition of pH and pKa,buffer solution and action.
13	25	16-Apr-20	Hendersin-Hazel equation,buffer mechanism of buffer action.
	26	17-Apr-20	revision of syllabus.
			Final Sessional Test



RPS Degree College, Balana (Mahendergarh)

Lesson Plan

2019-20(Even Semester)

Class and Section: B.Sc.(Non-Med) - 2nd Sem.(C)

Subject: ENGLISH

Name of the Faculty : Mr. Sushil Kumar

Week	Lecture	Date	Topics
	1	20-Jan-20	Introduction to Syllabus, Scheme of Exam & Learning Objectives/Outcomes
	2	21-Jan-20	Test to Check the Learning Level of the Students
	3	27-Jan-20	Essay 1 half complete
	4	28-Jan-20	Essay 1 complete
	5	03-Feb-20	Essay 2 complete
	6	04-Feb-20	
	7	10-Feb-20	Essay 3 half complete
	8	11-Feb-20	Essay 3 complete
	9	17-Feb-20	Doubt session
	10	18-Feb-20	UT1
	11	24-Feb-20	Translation from English to Hindi
	12	25-Feb-20	Testing students understanding
	13	02-Mar-20	Essay 4 half complete
	14	03-Mar-20	Essay 4 complete
	15	05-Mar-20	Doubt session
	16	09-Mar-20	Precis writing
	17	16-Mar-20	Essay 5 half complete
	18	17-Mar-20	
	19	23-Mar-20	Essay 5 complete
	20	24-Mar-20	UT2
	21	30-Mar-20	Essay 6 half complete
	22	31-Mar-20	Essay 6 complete
	23	06-Apr-20	Letter writing
	24	07-Apr-20	Revision
	25	13-Apr-20	Revision
	26	14-Apr-20	Revision
	20th - 24th April 20		Final Sessional Test



RPS Degree College, Balana (Mahendergarh)

Lesson Plan

2019-20 (Even Semester)

Class and Section: B.Sc NM 2nd Sem Section D

Subject: Basic Computer-I

Name of the Faculty : Ms Sapna

Week	Lecture	Date	Topics
1	1	16 Jan to 24 Jan	Computer Definition, Characteristics, Application, Components of computers, System I/O devices
2	1	27 Jan to 31 Jan	Concept of M/M, Magnetic & Optical storage devices
3	1	3 Feb to 7 Feb	Operating System Windows, Definition & function of OS, Basic Component of windows
4	1	10 Feb to 14 Feb	(LAB) Exploring Computer, Icons, taskbar, Desktop, managing files and folders, Control panel, Display properties,
5	1	17 Feb to 21 Feb	(LAB) Add/Remove S/W & H/W setting, Date & time, Screen Saver & Appearance
6			1st sessional
7	1	24 Feb to 28 Feb	(LAB) Word Processing , introduction to word processing, Meuns, Creating, editing & formatting document
8	1	2 Mar to 6 Mar	(LAB) Spell Checking, Printing, Views, Table, Word Art
9	0	9 Mar to 13 Mar	No Lect
10	1	16 Mar to 20 Mar	(LAB) Mail merge Macros
11	1	23 Mar to 27 Mar	Computer Communcation, Internet & its application.
12			2nd sessional
13	1	30 Mar to 3 April	(LAB) Surfing the internet using web browser
14	1	6 Apr to 10 Apr	(LAB) Creating Email ID, Viewing an e-mail, Sending an E-Mail to single and Multiple, Sending a file as an attachment
15	1	13 Apr to 17 Apr	Revision
16			Final sessional



RPS Degree College, Balana (Mahendergarh)

Lesson Plan

2019-20(Even Semester)

Class and Section: B.Sc.(Non-Med) - 2nd Sem.D

Subject: ENGLISH

Name of the Faculty : Mr. Sushil Kumar

Week	Lecture	Date	Topics
	1	20-Jan-20	Introduction to Syllabus, Scheme of Exam & Learning Objectives/Outcomes
	2	21-Jan-20	Test to Check the Learning Level of the Students
	3	27-Jan-20	Essay 1 half complete
	4	28-Jan-20	Essay 1 complete
	5	03-Feb-20	Essay 2 complete
	6	04-Feb-20	
	7	10-Feb-20	Essay 3 half complete
	8	11-Feb-20	Essay 3 complete
	9	17-Feb-20	Doubt session
	10	18-Feb-20	UT1
	11	24-Feb-20	Translation from English to Hindi
	12	25-Feb-20	Testing students understanding
	13	02-Mar-20	Essay 4 half complete
	14	03-Mar-20	Essay 4 complete
	15	05-Mar-20	Doubt session
	16	09-Mar-20	Precis writing
	17	16-Mar-20	Essay 5 half complete
	18	17-Mar-20	
	19	23-Mar-20	Essay 5 complete
	20	24-Mar-20	UT2
	21	30-Mar-20	Essay 6 half complete
	22	31-Mar-20	Essay 6 complete
	23	06-Apr-20	Letter writing
	24	07-Apr-20	Revision
	25	13-Apr-20	Revision
	26	14-Apr-20	Revision
	20th - 24th April 20		Final Sessional Test



RPS Degree College, Balana (Mahendergarh)

Subject: Inorganic chemistry

Name of the Faculty : MR. AMIT KUMAR

Week	Lecture	Date	Topics
1	1	22-Jan-20	Introduction of syllabus.
	2	23-Jan-20	Hydrogen Bonding – Definition, Types, effects of hydrogen bonding on properties of substances
2	3,4	29/1/20-30/1/20	Brief discussion of various types of Vander Waals Forces
3	5	05-Feb-20	Metallic Bond- Brief introduction to metallic bond, band theory of metallic bond
	6	06-Feb-20	Semiconductors- Introduction, types and applications
4	7	12-Feb-20	s-Block Elements Comparative study of the elements including , diagonal relationships, salient features of hydrides
	8	13-Feb-20	solvation and complexation tendencies including their function in biosystems
5	9	19-Feb-20	Chemical properties of the noble gases with emphasis on their low chemical reactivity,
	10	20-Feb-20	doubt
6	11,12	24/2/20-28/2/20	1st Class Test
7	13	04-Mar-20	chemistry of xenon, structure and bonding of fluorides, oxides & oxyfluorides of xenon.
	14	05-Mar-20	Emphasis on comparative study of properties of p-block elements
8	15	11-Mar-20	Diborane – properties and structure (as an example of electron – deficient compound and multicentre bonding), Borazene – chemical properties and structure Trihalides of Boron
	16	12-Mar-20	HOLIDAY.
9	17	18-Mar-20	Catenation, p π - d π bonding (an idea), carbides, fluorocarbons, silicates
	18	19-Mar-20	silicons – general methods of preparations, properties and uses
10	19,20.	23/3/20- 27/3/20	2nd Class Test
11	21	01-Apr-20	doubt
	22	08-Apr-20	Oxides – structures of oxides of N,P, oxyacids – structure and relative acid strengths of oxyacids of Nitrogen and phosphorus
12	23	09-Apr-20	Oxyacids of sulphur – structures and acidic strength H ₂ O ₂ –structure, properties
	24	15-Apr-20	Basic properties of halogen, interhalogens types properties
13	25	16-Apr-20	hydro and oxyacids of chlorine – structure and comparison of acid strength .
			Final Sessional Test



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RPS Degree College, Balana (Mahendergarh)

2019-20 (Even

Semester)

Class and Section: B.Sc.(NM) 2nd D

Subject: Organic chemistry

Name of the Faculty : Hitesh Yadav

Week	Lecture	Date	Topics
1	1	17-Jan-20	.Alkenes Nomenclature of alkenes,
	2	22-Jan-20	mechanisms of dehydration of alcohols and dehydrohalogenation of alkyl halides
2	3	24-Jan-20	mechanisms of dehydration of alcohols and dehydrohalogenation of alkyl halides
	4	29-Jan-20	Chemical reactions of alkenes mechanisms involved in hydrogenation
3	5	31-Jan-20	electrophilic and free radical additions, Markownikoff's rule, hydroboration-oxidation
	6	05-Feb-20	oxymercuration reduction, ozonolysis, hydration, hydroxylation and oxidation with KMnO ₄
4	7	07-Feb-20	Arenes and Aromaticity Nomenclature of benzene derivatives: Aromatic nucleus and side chain.
	8	12-Feb-20	Aromaticity: the Huckel rule, aromatic ions, annulenes up to 10 carbon atoms, aromatic, anti - aromatic and non - aromatic compounds
5	9	14-Feb-20	Aromatic electrophilic substitution general pattern of the mechanism, mechanism of nitration, halogenation, sulphonation
	10	21-Feb-20	Friedel-Crafts reaction. Energy profile diagrams. Activating, deactivating substituents and orientation
6	11,12		1st Class Test
7	13	04-Mar-20	Chemical reactions 1,2 and 1,4 additions (Electrophilic & free radical mechanism)
	14	06-Mar-20	Diels-Alder reaction, Nomenclature, structure and bonding in alkynes
8	15	11-Mar-20	Methods of formation. Chemical reactions of alkynes, acidity of alkynes
9	17	18-Mar-20	Nomenclature and classes of alkyl halides
	18	20-Mar-20	methods of formation, chemical reactions.
10	19,20		2nd Class Test
11	21	01-Apr-20	Mechanisms and stereochemistry of nucleophilic substitution reactions of alkyl halides
	22	03-Apr-20	SN ₂ and SN ₁ reactions with energy profile diagrams
12	23	09-Apr-20	Methods of formation and reactions of aryl halides
	24	10-Apr-20	The addition-elimination and the elimination-addition mechanisms of nucleophilic aromatic substitution reactions
13	25	15-Apr-20	Relative reactivities of alkyl halides vs allyl, vinyl and aryl halides.
	26	17-Apr-20	Revision of section A
14	Final Sessional Test		
15			Special Class
			Special Class
16	Final Exam		
17			



RPS Degree College, Balana (Mahendergarh)

Lesson Plan for even semester(2019-2020).

Class and Section: B.sc NM 2nd sem 'D'

Subject: Physical chemistry

Name of the Faculty : Kiran yadav

Week	Lecture	Date	Topics
1	1	20-Jan-20	Introduction of syllabus.
	2	21-Jan-20	Sec-A: Kinetics-1: rate of reaction,rate equation.
2	3,4	27/1/20-28/1/20	effect of temp.,concentration,pressure,solvent,light,catalyst.
3	5	03-Feb-20	order of reaction,integrated rate expression for zero order,1st order.
	6	04-Feb-20	integrated rate equation for second and third order reaction.
4	7	10-Feb-20	half life period of a reaction,methods of determination of order of reaction.
	8	11-Feb-20	Sec-B: Kinetics -2: effect of temperature on the rate of reaction-Arrhenius equation,simple collision theory for unimolecular and bimolecular collision.
5	9	17-Feb-20	transition state theory of bimolecular reaction.
	10	18-Feb-20	Revision of section A and B.
6	11,12	24/2/20-28/2/20	1st Class Test
7	13	02-Mar-20	Sec:C-Electrochemistry-1: electrolytic conduction, factors affecting electrolytic conduction.
	14	03-Mar-20	specific conductance,molar conductance,equivalent conductance and relation among them,their variation with concentration.
8	15	09-Mar-20	Arrhenius theory of ionization,Ostwald's Dilution law.
	16	10-Mar-20	HOLIDAY.
9	17	16-Mar-20	Debye- Huckel -Onsager's equation for strong electrolytes(elementry treatment only).
	18	17-Mar-20	transport no.,definition and determination by Hittor's methods(numericals included).
10	19,20.	23/3/20- 27/3/20	2nd Class Test
11	21	30-Mar-20	Sec-D: Electrochemistry-2: Kohlrausch's law in calculation of molar ionic conductanceand effect of viscosity,temperature,pressure on it.
	22	31-Mar-20	application of kohlrausch's law in calculation of weak electrolytes at infinite dilution.
12	23	06-Apr-20	application of conductivity measurement: determination of degree of dissociation,determination of Ka of acids,determination of solubility product of sparingly soluble salts.
	24	07-Apr-20	conductometric titrations,definition of pH and pKa,buffer solution and action.
13	25	13-Apr-20	Hendersin-Hazel equation,buffer mechanism of buffer action.
	26	14-Apr-20	revision of syllabus.
			Final Sessional Test