Lesson Plan

Name of the Assistant Professor	Dr. Kanhu Charan Rout
Class and Section:	B. Sc (Honours Chemistry VI th Sem) Organic Chemistry -II
Subject:	Chemistry

Week		Topics
1	Day 1	introduction
	Day 2	Classification of Terpinoids
	Day 3	Nomenclature and occurance
	Day 4	Methods for structure determination
	Day 5	Isoprene rule
	Day 6	
		Sunday
2	Day 7	structure determination and stereochemistry of citral
	Day 8	synthesis of citral
	Day 9	Structure determination of geraniol
	Day 10	Synthesis of gereniol
	Day 11	essential oils
	Day 12	
3	Day 13	Introduction of Alkaloids
	Day 14	Classification
	Day 15	extraction
	Day 16	Physiological action of alkaloids
	Day 17	general characteristics
	Day 18	
		Sunday
4		VasantPanchami
	Day 19	general methods of structure determination
		Sir Chhotu Ram Jayanti
	Day 20	Hofman's exhaustive methylation
		Republic Day
	Day 21	isolation
		Sunday
5	Day 22	structure ellucidation of nicotine
	Day 23	synthesis of nicotine
	Day 24	synthesis of nicotine
1-Feb	Day 25	structure ellucidation of cocaine
	Day 26	synthesis of cocaine
	Day 27	
		Sunday
2	Day 28	synthesis of piperine
	Day 29	class test
	Day 30	classification of pesticides
	Day 31	Natural pesticides
	Day 32	Nicotinides synthesis
		MaharshiDayanandSaraswatiJayanti
		Sunday
3	Day 33	pyrethroids synthesis
		MahaShivratri
	Day 34	Rotenoids synthesis
	Day 35	Sabodilia synthesis
	Day 36	Ryania synthesis
	Day 37	
		Sunday
4	Day 38	Synthetic pesticides
	Day 39	nitrophenol
	Day 40	Halogens derivative of aromatic hydrocarbons
	Day 41	alicyclic hydrocarbons
	Day 42	Organophosphorus pesticides
	Day 43	
		Sunday
5	Day 44	DDT preparation
	Day 45	reaction and uses of DDT
	Day 46	BHC preparation
1-Mar		Guru Ravidas Birthday
		reaction and uses of BHC
	Day 47	Malathion preparation
		reaction and uses of malathion
2	Day 48	Parathion preparation
	Day 49	reaction and uses of parathion
	Day 50	class test
	Day 51	introduction of vitamins
	Day 52	classification
	Day 53	
		Sunday
3	Day 54	pro vitamins
	Day 55	occurrence
	Day 56	structure of vitamin A
	Day 57	Deficiency diseases of Vitamin A
	Day 58	Structure of Vitamin B
	Day 59	
		Sunday
4	Day 60	Deficiency diseases of Vitamin B1
	Day 61	structure of Vitamin B2
	Day 62	Deficiency diseases of Vitamin B2
	Day 63	Vitamin B6
		ShaheediDiwas of Bhagat Singh, Rajguru & Sukhdev
	Day 64	Deficiency diseases of Vitamin B6
		Sunday/ Ram Navami
5	Day 65	Vitamin B12
	Day 66	Deficiency diseases of Vitamin B12
	Day 67	Vitamin C
		MahavirJayanti
	Day 68	Vitamin D
	Day 69	
1-Apr		Sunday
	Day 70	Vitamin E
	Day 71	Vitamin H
	Day 72	Vitamin K
	Day 73	Introduction of Harmones
	Day 74	Functions of harmones
	Day 75	
		Sunday
2	Day 76	Difference between harmones and vitamins
	Day 77	Classification and study of Thyroxine
	Day 78	Adrenalin
	Day 79	Insulin
	Day 80	Testosterone
		Dr AmbedkarJayanti / Vaisakhi
		Sunday
3	Day 81	Progesterone
	Day 82	Estrogens
		ParashuramaJayanti
	Day 83	Cortison
	Day 84	structure of secreting gland
	Day 85	functions of secreting glands
		Sunday
4	Day 86	Revision
	Day 87	
	Day 88	
	Day 89	
	Day 90	final class test
	Day 91	

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Class and Section: B.Sc HC 6
Subject- Inorganic Chemistry
Name of the Faculty : Dr. Prashant Kumar

Week	Lecture	Date	Topics
1	1	20-Jan-20	Introduction of syllabus.
	2	21-Jan-20	Primary and secondary pollutant, sources, air pollution
2	3	27-Jan-20	Factors of air pollution
3	4	28-Jan-20	Photochemical smog
	5	03-Feb-20	Mechanism of photochemical smog formation
4	6	04-Feb-20	Air Purification by microorganisms
	7	10-Feb-20	Acid rain
5	8	11-Feb-20	Types of water pollution
	9	17-Feb-20	Revision
6	**18-Feb-20**		1st Class Test
7	11	24-Feb-20	Sources of water pollution
	12	25-Feb-20	Approaches to prevent and control water pollution
8	13	02-Mar-20	Approaches to prevent and control water pollution
	14	03-Mar-20	Introduction of industrial wastes, types of industrial wastes
9	15	09-Mar-20	Principal of industrial wastes treatment and disposal of industrial wastes
	16	10-Mar-20	Holiday.
10	**16-Mar-20**		2nd Class Test
11	18	17-Mar-20	Composition of nuclei, structure of nucleus, force operating within nucleus, nuclear stability, binding energy
	19	23-Mar-20	Types of nuclear reactions, nuclear theory, thermonuclear reaction
12	20	24-Mar-20	Radiation detection and measurement, G M counter, scientillator counter, semiconductor detectors
	21	30-Mar-20	Activation analysis, isotopic dilution analysis, radio metric titration
13	22	31-Mar-20	Crystal structure of zinc blende, wurtzite NiAs, CsCl, CaF2, CdI2, BiI3
	23	06-Apr-20	Factors affecting crystal structures
14			revisin of syllabus.
15			
16			Final Sessional Test
17			

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Lesson Plan for even semester(2019-2020).

Class and Section: B.sc HC 6th sem .

Subject: Physical chemistry: PAPER-1.

Name of the Faculty : Kiran yadav

Week	Lecture	Date	Topics
1	1	21-Jan-20	Introduction of syllabus.
	2	22-Jan-20	Sec-A:Vibrational spectrum:: vibrational energy level of a simple harmonic ossilator and anharmonic ossilator.
	3,4	24-Jan-20	selection rules,pure vibrational spectrum of diatomic molecules.
2	5	28-Jan-20	determination of force constant and qualitative relatiin of force constant and bond energy.
	6	29-Jan-20	idea of vibrational frequencies of different functional groups.
	7,8	31-Jan-20	vibrational rotational spectra,normal modes of vibrations of polyatomic molecules.
3	9	04-Feb-20	isotopic effect of vibrational rotational spectrum.
	10	05-Feb-20	Sec-B: Raman spectrum:: general introduction of raman spectra,concept of polarizibility.
	11,12	07-Feb-20	pure rotational and pure vibrational raman spectra of diatomic molecules.
4	13	11-Feb-20	selection rules,quantum theory of raman spectrum.
	14	12-Feb-20	quantum theory ofrotation-vibrational Raman spectrum,applications of raman spectra.
	15,16	14-Feb-20	general introduction of NMR spectrum and its principle.
5	17	18-Feb-20	chemical shift, nmr technique.
	18	19-Feb-20	revision of sec-A .
	19,20	21-Feb-20	HOLIDAY.
6	**1,22,23,24**	**24/2/20-28/2/2**	1st Class Test
7	25	03-Mar-20	Sec-C: Electronic spectrum: cocept of potential energy curves for bonding and antibonding orbitals.
	26	04-Mar-20	qualitative discription of selection rule.
	27,28	06-Mar-20	Franck condon principle, idea of term symbol and parity.
8	29	10-Mar-20	HOLIDAY.
	30	11-Mar-20	qualitative description of sigma and pi and n molecularorbitals,their energy level and respective transitions.
	31,32	13-Mar-20	applications of ESR spectroscopy.
9	33	17-Mar-20	revision of sec-B.
	34	18-Mar-20	revision of sec-C.
	35,36	20-Mar-20	Sec-D: Quantum mechnics-1: dual nature of light with matter, photoelectric effect.
10	**7,38,39,40**	**23/3/20- 27/3/2**	2nd Class Test
11	41	31-Mar-20	wave function and its significance.
	42	01-Apr-20	role of operators in quatum mechanics, Hemiltonian operator.
	43,44	03-Apr-20	eigen value and eigen function and eigen equation
12	45	07-Apr-20	postulates of quatum mechanics.
	46	08-Apr-20	determination of wave function and energy of a particle in one dimensional box.
	47,48	10-Apr-20	pictorial represention and significance of particle in1-D box.
13	49	14-Apr-20	revision of sec- D.
	50	15-Apr-20	revision of the syallbus.
	51,52	17-Apr-20	revision of syllabus.
			Final Sessional Test

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Lesson Plan
2019-20 (Even Semester)
B.Sc. H.C. 6th sem
Physical chemistry Paper -2
Name of the Faculty : Ms. Vandana

Week	Date	lecture	Topics
1	1/20/2020		introduction of syllabus
	1/21/2020		black body radiation and spectral distribution of black body radiation
	1/22/2020		Planck's law
	1/24/2020		field capacity of solids
2	1/27/2020		bahut model of hydrogen
	1/28/2020		defects of Bohr's model
	1/29/2020		Compton effect
	1/31/2020		Molecular orbital theory
3	2/3/2020		criteria for forming molecular orbital
	2/4/2020		criteria for forming molecular orbital from atomic orbitals
	2/5/2020		construction of molecular orbital by linear combination of atomic orbital
	2/7/2020		construction of molecular orbital in H2+ ion
4	2/10/2020		calculation of energy level from wave function
	2/11/2020		calculation of energy level from wave function
	2/12/2020		physical picture of bonding and antibonding wave function
	2/14/2020		concept of pi orbitals and Pi star orbitals
5	2/17/2020		hybrid orbitals SP SP2 and SP3
	2/18/2020		calculation of coefficients of atomic orbital used in these hybrid orbitals
	2/19/2020		calculation of coefficients
	2/21/2020		holiday
6			1st Class Test
7	3/2/2020		introduction of valence bond model
	3/3/2020		comparison of molecular orbital and valence bond model
	3/4/2020		revision
	3/6/2020		revision
8	3/9/2020		introduction of catalysis
	3/10/2020		holiday
	3/11/2020		homogenous and heterogeneous catalysis
	3/13/2020		enzyme catalysis
9	3/16/2020		Michael menten equation
	3/17/2020		intermediate compound formation theory
	3/18/2020		adsorption theory
	3/20/2020		general characteristics of catalysis
10			2nd Class Test
11	3/30/2020		positive and negative catalysis and auto catalyst and shape selective catalysis
	3/31/2020		introduction of chromatography
	4/1/2020		classification of chromatographic method
	4/3/2020		principle of Differential migration and nature of differential migrations
12	4/6/2020		adsorption phenomenon and nature of adsorbent and solvent system
	4/7/2020		RF values
	4/8/2020		basic principle of partition paper chromatography
	4/10/2020		basic principle of column thin layer and liquid-liquid partition chromatography
13	4/13/2020		high performance liquid chromatography
	4/14/2020		schrodinger wave equation of simple harmonic oscillator
	4/15/2020		application of chromatographic methods
	4/17/2020		revision
14			3rd class test
15	4/27/2020		
	4/28/2020		
	4/29/2020		
	4/30/2020		
16			final sessional