



Aggarwal College Ballabgarh

LESSON PLAN

17 WEEKS (JAN-APRIL)-2025

Name of Faculty: Dr. Archana Chauhan

Designation/ Department: Assistant Professor Chemistry

CLASS: BSc NM		SEMESTER: 6 th	SECTION: A
SUBJECT: Physical Chemistry			
Week			
1	7-1-2025		
	8-1-2025		
	9-1-2025		
	10-1-2025		
	11-1-2025		
	12-1-2025	S. U. N. D. A. Y.	
2	13-1-2025		
	14-1-2025		
	15-1-2025	Concept of potential energy curves for bonding and antibonding molecular orbitals	
	16-1-2025	Qualitative description of selection rules	
	17-1-2025		
	18-1-2025		
	19-1-2025	S. U. N. D. A. Y.	
3	20-1-2025		
	21-1-2025		
	22-1-2025	Franck- Condon principle, Energy level and respective transitions	

	23-1-2025	Qualitative description of sigma and pie and n molecular orbital (MO)
	24-1-2025	
	25-1-2025	
	26-1-2025	REPUBLIC DAY /S. U. N. D. A. Y.
4	27-1-2025	
	28-1-2025	
	29-1-2025	Interaction of radiation with matter, Difference between thermal and photochemical processes
	30-1-2025	Laws of photochemistry: Grotthus-Draper law, Stark- Einstein law (law of photochemical equivalence)
	31-1-2025	
	1-2-2025	
	2-2-2025	S. U. N. D. A. Y/BASANT PANCHAMI
5	3-2-2025	
	4-2-2025	
	5-2-2025	Jablonski diagram depicting various processes occurring in the excited state
	6-2-2025	Qualitative description of fluorescence
	7-2-2025	
	8-2-2025	
	9-2-2025	S. U. N. D. A. Y
6	10-2-2025	
	11-2-2025	
	12-2-2025	HOLIDAY: GURU RAVIDAS JAYANTI
	13-2-2025	Phosphorescence, non-radiative processes (internal conversion, intersystem-crossing)
	14-2-2025	
	15-2-2025	

	16-2-2025	S. U. N. D. A. Y.
7	17-2-2025	
	18-2-2025	
	19-2-2025	Quantum yield, photosensitized reactions-energy transfer processes (simple examples)
	20-2-2025	Assignment-01
	21-2-2025	
	22-2-2025	
	23-2-2025	S. U. N. D. A. Y.
8	24-2-2025	
	25-2-2025	
	26-2-2025	HOLIDAY: MAHA SHIVRATRI
	27-2-2025	TEST-01
	28-2-2025	
	1-3-2025	
	2-3-2025	S. U. N. D. A. Y.
9	3-3-2025	
	4-3-2025	
	5-3-2025	Ideal and non-ideal solutions, methods of expressing concentrations of solutions, activity and activity coefficient
	6-3-2025	Assignment-02
	7-3-2025	
	8-3-2025	
	9-3-2025	S. U. N. D. A. Y.
10	10-3-2025	

	11-3-2025	
	12-3-2025	Dilute solution, Colligative properties, Raoult's law
	13-3-2025	Relative lowering of vapour pressure, molecular weight determination
	14-3-2025	
	15-3-2025	
	16-03-2025	S. U. N. D. A. Y.
11	17-3-2025	
	18-3-2025	
	19-3-2025	Osmosis law of osmotic pressure and its measurement, determination of molecular weight from osmotic pressure.
	20-3-2025	Elevation of boiling point and depression of freezing point
	21-3-2025	
	22-3-2025	
	23-3-2025	S. U. N. D. A. Y.
12	24-3-2025	
	25-3-2025	
	26-3-2025	Thermodynamic derivation of relation between molecular weight and elevation in boiling point and depression in freezing point
	27-3-2025	Experimental methods for determining various colligative properties. Abnormal molar mass, degree of dissociation and association of solutes.
	28-3-2025	
	29-3-2025	
	30-3-2025	S. U. N. D. A. Y.
13	31-3-2025	HOLIDAY: ID-UL-FITR
	1-4-2025	
	2-4-2025	
	3-4-2025	Statement and meaning of the terms – phase component and degree of freedom, thermodynamic derivation of Gibbs phase rule

	4-4-2025	phase equilibria of one component system –Example – water and Sulphur systems
	5-4-2025	
	6-4-2025	S. U. N. D. A. Y.
14	7-4-2025	
	8-4-2025	
	9-4-2025	Assignment-03
	10-4-2025	HOLIDAY: MAHAVIR JAYANTI
	11-4-2025	
	12-4-2025	
	13-4-2025	S. U. N. D. A. Y.
15	14-4-2025	HOLIDAY: AMBEDKAR JAYANTI
	15-4-2025	
	16-4-2025	Phase equilibria of two component systems solid-liquid equilibria
	17-4-2025	Simple eutectic Example Pb-Ag system, desilverisation of lead
	18-4-2025	
	19-4-2025	
	20-4-2025	S. U. N. D. A. Y.
16	21-4-2025	
	22-4-2025	
	23-4-2025	Test-02
	24-4-2025	Revision
	25-4-2025	
	26-4-2025	
	27-4-2025	S. U. N. D. A. Y.

17	28-4-2025	
	29-4-2025	
	30-4-2025	HOLIDAY: AKSHAY TRITYA
	01-05-2025	Revision
	02-05-2025	
	03-05-2025	
	04-05-2025	S. U. N. D. A. Y.



Signature