SWAMI VIVEKANAND GOVT P.G. COLLEGE LOHAGHAT (CHAMPAWAT) DEPARTMENT OF CHEMISTRY

Teaching Action Plan
Academic session 2021-22
(NEW SUYLLABUS)

B.Sc. I SEMESTR

PAPER I

	ORGANIC CHEMISTRY		
UNIT	CONTENT OF SYLLABUS	REQUIRED PERIOD	
01	Structure and Bonding	04	
02	Mechanism of Organic Reactions	07	
03	Stereochemistry of Organic Compounds	07	
04	Alkanes and Cycloalkanes	07	
05	Alkenes, Cycloalkenes, Dienes and Alkynes	07	
06	Arenes and Aromaticity	07	

NOTE- Number of periods for completion of above mentioned content of syllabus may be increase or decrease during online classes.

PAPER II

	INORGANIC CHEMISTRY			
UNIT	CONTENT OF SYLLABUS	REQUIRED PERIOD		
01	Atomic Structure	07		
02	Periodic Properties	05		
03	Chemical Bonding-I	08		
04	Ionic Solids	05		
05	s-Block Elements	06		
06	s-Block Elements	08		

NOTE- Number of periods for completion of above mentioned content of syllabus may be increase or decrease during online classes.

B.Sc. II SEMESTR

PAPER I

	INORGANIC CHEMISTRY		
UNIT	CONTENT OF SYLLABUS	REQUIRED PERIOD	
01	Chemical Bonding-II	08	
02	Redox Reactions	07	
03	Coordination Chemistry-I	09	
04	Chemistry of Transition Elements (First Transition Series)	06	
05	Chemistry of Transition Elements (Second and Third Series)	05	

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PAPER II

	PHYSICAL CHEMISTRY			
UNIT	CONTENT OF SYLLABUS	REQUIRED PERIOD		
01	Gaseous State	12		
02	Solid State	08		
03	Colloidal State	08		
04	Chemical Kinetics and Catalysis	12		

NOTE- Number of periods for completion of above mentioned content of syllabus may be increase or decrease during online classes.

B.Sc. III SEMESTR

PAPER I

	ORGANIC CHEMISTRY		
UNIT	CONTENT OF SYLLABUS	REQUIRED PERIOD	
01	Alkyl and Aryl Halides	07	
02	Alcohols	05	
03	Phenols	05	
04	Ethers and Epoxides	05	
05	Aldehydes and Ketones	07	
06	Carboxylic Acids; Carboxylic acid derivatives	10	

NOTE- Number of periods for completion of above mentioned content of syllabus may be increase or decrease during online classes.

PAPER II

	PHYSICAL CHEMISTRY			
UNIT	CONTENT OF SYLLABUS	REQUIRED		
		PERIOD		
01	Thermodynamics- I	12		
02	Chemical Equilibrium	08		
03	Thermochemistry	12		
04	Surface Chemistry	8		

NOTE- Number of periods for completion of above mentioned content of syllabus may be increase or decrease during online classes.

B.Sc. IV SEMESTR

PAPER I

	INORGANIC CHEMISTRY		
UNIT	CONTENT OF SYLLABUS	REQUIRED PERIOD	
01	Chemistry of Lanthanides	05	
02	Chemistry of Actinides	07	
03	Acids and Bases	06	
04	Hard and Soft Acid-Base Theory	07	
05	Non Aqueous Solvents	05	
06	Bioinorganic Chemistry	08	

NOTE- Number of periods for completion of above mentioned content of syllabus may be increase or decrease during online classes.

PAPER II

	ORGANIC CHEMISTRY		
UNIT	CONTENT OF SYLLABUS	REQUIRED PERIOD	
01	Electromagnetic Spectrum: Absorption Spectroscopy	08	
02	Nitrogen Containing Organic Compounds	08	
03	Organic Synthesis via Enolates	05	
04	Organo-Metallic Compounds	05	
05	Synthetic Dyes	05	
06	Heterocyclic Compounds	08	

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B.Sc. V SEMESTR

PAPER I

	PHYSICAL CHEMISTRY		
UNIT	CONTENT OF SYLLABUS	REQUIRED PERIOD	
01	Thermodynamics II	12	
02	Solutions and Colligative Properties	08	
03	Photochemistry	08	
04	Energy and Distribution Law	06	
05	Thermodynamics III	06	

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PAPER II

INORGANIC CHEMISTRY			
UNIT	CONTENT OF SYLLABUS	REQUIRED PERIOD	
01	Thermodynamic and Kinetic Aspects of Coordination Compounds	05	
02	Coordination Chemistry-II	08	
03	Magnetic Properties of Transition Metal Complexes	07	

04	Electronic Spectra of Transition Metal Complexes	07
05	Organometallic Chemistry	07
06	Inorganic Polymers of Silicon and Phosphorus	05

NOTE- Number of periods for completion of above mentioned content of syllabus may be increase or decrease during online classes.

B.Sc. I SEMESTR

PAPER I

ORGANIC CHEMISTRY			
UNIT	CONTENT OF SYLLABUS	REQUIRED PERIOD	
01	Spectroscopy	08	
02	Carbohydrates	07	
03	Amino Acids, Peptides, Proteins and Nucleic Acids	07	
04	Fats, Oils and Detergents	06	
05	Synthetic Polymers	06	
06	Natural Products	05	

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PAPER II

PHYSICAL CHEMISTRY			
UNIT	CONTENT OF SYLLABUS	REQUIRED PERIOD	
01	Electrochemistry I	10	
02	Electrochemistry II	08	
03	Phase Equilibrium	08	
04	Elementary Quantum Mechanics 8	08	
05	Spectroscopy	06	

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