

NAME: DR RAJDEEP YADAV

EXTENSION LECTURER
DEPT. OF CHEMISTRY,
SMSD GOVT COLLEGE NANGAL CHOUDHARY

DATE	CURICULUM (BSc VI SEM)	session 2022-23
17-01-23 to 24-01-23	Inorganic chemistry Section—C Bioinorganic Chemistry Essential and trace elements in biological processes, metalloporphyrins with special reference to haemoglobin and myoglobin.	
25-01-23 to 31-01-23	Biological role of alkali and alkaline earth metal ions with special reference to Ca ²⁺ . Nitrogen fixation.	
01-02-23 to 07-02-23	Section—D Silicones and Phosphazenes Silicones and phosphazenes, their preparation, properties, structure and uses	
08-02-23 to 14-02-23	Organic chemistry SECTION – A Heterocyclic Compounds-I Introduction: Molecular orbital picture and aromatic characteristics of pyrrole, furan, thiophene and pyridine. Methods of synthesis and chemical reactions with particular emphasis on the mechanism of electrophilic substitution.	
15-02-23 to 21-02-23	Mechanism of nucleophilic substitution reactions in pyridine derivatives. Comparison of basicity of pyridine, piperidine and pyrrole	
22-02-23 to 28-02-23	SECTION – B 1. Heterocyclic Compounds-II Introduction to condensed five and six- membered heterocycles. Preparation and reactions of indole, quinoline and isoquinoline with special reference to	
01-03-23 to 15-03-23	Fisher indole synthesis, Skraup synthesis and Bischler-Napieralski synthesis. Mechanism of electrophilic substitution reactions of, quinoline and isoquinoline	
16-03-23 to 22-03-23	2. Organosulphur Compounds Nomenclature, structural features, Methods of formation and chemical reactions of thiols, thioethers,	
23-03-23 to 29-03-23	sulphonic acids, sulphonamides and sulphaguanidine. Synthetic detergents alkyl and aryl sulphonates.	
30-03-23 to 05-04-23	SECTION – C 1. Organic Synthesis via Enolates Acidity of -hydrogens, alkylation of diethyl malonate and ethyl acetoacetate.	

06-04-23 12-04-23	to	Synthesis of ethyl acetoacetate: the Claisen condensation. Keto-enol tautomerism of ethyl acetoacetate.
13-04-23 19-04-23	to	2. Synthetic Polymers Addition or chain-growth polymerization. Free radical vinyl polymerization,
20-04-23 26-04-23	to	ionic vinyl polymerization, Ziegler-Natta polymerization and vinyl polymers.
27-04-23 02-05-23	to	Condensation or step growth polymerization. Polyesters, polyamides, phenol formaldehyde resins, urea formaldehyde resins, epoxy resins and polyurethanes. Natural and synthetic rubbers.
03-05-23 09-05-23	to	Section – D Amino Acids, Peptides & Proteins Classification, of amino acids. Acid-base behavior, isoelectric point and electrophoresis. Preparation of α -amino acids. Structure and nomenclature of peptides and proteins.
10-05-23 16-05-23	to	Classification of proteins. Peptide structure determination, end group analysis, selective hydrolysis of peptides. Classical peptide synthesis, solid-phase peptide synthesis. Structures of peptides and proteins: Primary & Secondary structure.
		Revision