

TELANGANA STATE BOARD OF INTERMEDIATE EDUCATION, HYDERABAD
ACADEMIC YEAR 2020-2021

70% CONTENT IN VIEW OF COVID-19 PANDEMIC

INTERMEDIATE 2nd YEAR CHEMISTRY SYLLABUS

Chapter 1 SOLID STATE	1.1 General characteristics of solids. 1.2 Amorphous and crystalline solids. 1.3 Classification of crystalline solids 1.4 Probing the structure of solids: X-ray Crystallography 1.5 Crystal lattices and unit cells 1.6 Number of atoms in a Unit cell 1.7 Close packed structures 1.8 Packing efficiency 1.9 Calculations involving unit cell dimensions 1.10 Imperfections in solids.
Chapter 2 SOLUTIONS	2.1 Types of solutions 2.2 Expressing concentration of solutions 2.3 Solubility 2.4 Vapour pressure of liquid solutions 2.5 Ideal and non-ideal solutions 2.6 Colligative properties and determination of molar mass.
Chapter 3 ELECTROCHEMISTRY AND CHEMICAL KINETICS ELECTROCHEMISTRY	3.3 Nernst equation 3.4 Conductance of electrolytic solutions applications of Kohlrausch's law chemical kinetics: 3.5 Electrolysis 3.9 Rate of a chemical reaction 3.10 Factors influencing rate of a reaction 3.11 Integrated rate equations 3.12 Pseudo first order reaction 3.13 Temperature dependence of the rate of a reaction.
Chapter 4 SURFACE CHEMISTRY	4.1 Adsorption and absorption 4.3 Colloids 4.4 Classification of colloids 4.6 Colloids Around us- application of colloids.
Chapter 5 GENERAL PRINCIPLES OF METALLURGY	Entire Chapter Deleted
Chapter 6 p-BLOCK ELEMENTS GROUP-15 ELEMENTS	6.1 Introduction-Occurance 6.2 Dinitrogen 6.3 Compounds of nitrogen-preparation and properties of ammonia 6.4 Oxides of nitrogen 6.5 Preparation and properties of nitric acid 6.6 Phosphorous-allotropic forms GROUP-16 ELEMENTS 6.10 Introduction-Occurance 6.11 Dioxygen-preparation, properties and uses 6.12 Simple oxides 6.13 Ozone-preparation, properties, structure, uses 6.14 Sulphur-allotropic forms 6.15 Sulphur dioxide-preparation, properties, uses 6.16 Oxoacids of sulphur, 6.17 sulphuric acid properties and uses GROUP-17 ELEMENTS 6.18 Occurance-Introduction 6.19 Chlorine-preparation,

	properties and uses 6.20 Hydrogen chloride: preparation, properties, uses 6.21 Oxoacids of halogens 6.22 Interhalogen compounds GROUP-18 ELEMENTS 6.23 Introduction-Occurance, electronic configuration, ionization enthalpy, atomic radii electron gain enthalpy, physical and chemical properties.
Chapter 7 d AND f BLOCK ELEMENTS & COORDINATION COMPOUNDS	7.1 Position in the periodic table 7.2 Electronic configuration of the d-block elements 7.3 General properties of the transition elements 7.8 Werner's theory of coordination compounds 7.9 Definitions of some terms used in coordination compounds 7.10 Nomenclature of coordination compounds 7.11 Isomerism in coordination compounds 7.12 Bonding in coordination compounds 7.13 Bonding in metal carbonyls 7.14 Stability of coordination compounds 7.15 Importance and applications of coordination compounds.
Chapter 8 POLYMERS	Entire Chapter Deleted
Chapter 9 BIOMOLECULES	9.1 Carbohydrates: Classification of carbohydrates, mono saccharides 9.2 Amino acids and Proteins. 9.5 Nucleic acids
Chapter 10 CHEMISTRY IN EVERYDAY LIFE	Entire Chapter Deleted
Chapter 11 HALO ALKANES AND HALO ARENES	11.1 Classification and nomenclature 11.2 Nature of C-X bond 11.3 Methods of preparation : alkyl and aryl halides 11.4 Physical properties of alkyl and arylhalides 11.5 Chemical reactions of alkyl and aryl halides.
Chapter 12 ORGANIC COMPOUNDS CONTAINING C,H AND O	(Alcohols, Phenols, Ethers, Aldehydes, Ketones and Carboxylic acids)Alcohols, Phenols and Ethers 12.1 Alcohols, phenols and ethers- classification 12.2 Nomenclature of alcohols, phenols and ethers 12.3 Structures of hydroxyl ,ether functional groups 12.4 Methods of preparation of alcohols, phenols 12.5 Physical properties of alcohols and phenols 12.6 Chemical reactions of alcohols and phenol 12.8 Ethers-Methods of preparation, physical properties and Chemical reactions Aldehydes and Ketones 12.9 Nomenclature and structure of carbonyl group 12.10Preparation of aldehydes and ketones 12.11Physical properties of aldehydes and ketones 12.12 Chemical reactions of aldehydes and ketones 12.13 Uses of aldehydes and ketones Carboxylic Acids 12.14 Nomenclature and structure of carboxyl group 12.15 Methods of preparation of carboxylic acids 12.16 Physical properties of carboxylic acids 12.17 Chemical reactions of carboxylic acids 12.18 Uses of carboxylic acids.
Chapter 13	Amines 13.1 Structure of amines 13.2 Classification 13.3

**ORGANIC
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NITROGEN**

Nomenclature 13.4 Preparation of amines 13.5 Physical properties of amines 13.6 Chemical reactions of amines.