## **Contents**

**PHYSICS** 

## **UNIT-1** General Physics 3–74 UNIT-4 Light 115-148 **UNIT-2 Heat** 75–89 UNIT-5 Electricity and Magnetism 149-190 **UNIT-6 Modern Physics** 191–217 UNIT-3 Vibrations, Waves and Sound 90-114 UNIT-7 Our Universe 218-219 CHEMISTRY **General Information** 2-14 3. Solutions 33-41 List of the Atomic Masses of the 4. Solid State 42-46 2 Elements 5. Nuclear Chemistry 47-54 3 **Electrochemical Series** 6. Chemical Equilibrium 55-61 Prefix for SI Units 3 7. Ionic Equilibrium 62-69 4 **Important Constant** 8. Thermodynamics and **Conversion Factors** 4 Thermochemistry 70-75 Important Compounds and 9. Chemical Kinetics 76-81 their Formulae 4 10. Electro Chemistry 82-89 Some Eminent Chemists and 11. Surface Chemistry 90-94 7 their Discoveries Some Important Alloys, their **INORGANIC CHEMISTRY** Compositions and Uses 9 12. Principles of Metallurgical **Important Ores** 10 Operations 97–100 Some Common Bond Lengths 11 13. Chemical Periodicity 101-104 Hardness of Minerals 12 14. Comparative Study of Different Absorbent 12 Elements 105-119 Name of Some Important Acids and their Salts 12 (Hydrogen and Alkali Metals) Nobel Prize Winners: Chemistry 13 15. Transition Elements (d-Block Elements) 120-124 PHYSICAL CHEMISTRY 16. Co-ordination Compounds 125-128 1. Structure of Atom 16-24 2. Chemical Bond 25-32 17. Chemical Analysis 129-134

	ORGANIC CHEMISTRY	21. Carbonyl Compounds,		
	18. General Organic Chemistry	136–148	Carboxylic Acids and Amines	s 166–176
	19. Alkanes, Alkenes, Alkynes,		22. Polymers	177–180
		149–157	23. Bio-molecules	181–185
	20. Halogen Compounds,			
	Alcohols and Phenols	158–165	<ul> <li>Some Miscellaneous Facts</li> </ul>	186–188
		<b>BOT</b> A	ANY	
•	The Cell	3–19	<ul><li>Physiology</li></ul>	106–128
•	Mendelism	20-33	<ul><li>Enzymes</li></ul>	129–142
•	Prokaryotes	34–44		143–156
•	Classification of Plant Kingdom	45–75	*	157–169
	Microsporogenesis in Angiosperms	76–92	•	170–174
	Tissues and Tissue System	93–105		175–184
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2	
	7	ZOOL	OCV	
	•			
•	General Information	3–31	Important Vaccines	24
	Major Sub-divisions of Biology	3	Insect Vectors of Human Disease	
	Some Important Sub-divisions of	3	Some Important Facts about Hun Body	nan 27
	Zoology Important Scientific Discoveries	<i>5</i>	Some Important Facts	29
	Important Scientific Discoveries Important Research Institutes	8	<ul> <li>Multicellularity–Structure and</li> </ul>	2,
	Important Abbreviations	8	Function of Animal Tissues	32–45
	Some Additional Abbreviations	9	<ul> <li>Structure and Physiology of</li> </ul>	32-43
	Biosphere Reserves in India	9	Different Organ System of	
	National Parks and Wild-life		Human Body	46–64
	Sancturies in India	10	<ul><li>Receptors</li></ul>	65–69
	Endangered Animal Species in Ind	ia 13	<ul> <li>Skeleton, Joints and Muscles</li> </ul>	70–78
	Important Animals-Their Zoologic	cal	<ul><li>Endocrine System</li></ul>	79–89
	& Common Names	15	<ul> <li>Vitamins and Minerals in Food</li> </ul>	77 07
	Disorders due to Vitamin Deficience	cies 19	Function as Regulators	90–97
	Important Minerals and their		<ul> <li>Economic Zoology–Silk Indus-</li> </ul>	70 71
	Physiological Roles in Man	19	try, Apiculture, Lac Industry,	
	Important Hormonal Diseases	20	Poultry, Fisheries and Pearl	
	Anomalies due to Chromosomal		•	00 104
	Aberration in Human	21	Industry	98–106
	Communicable Diseases	22	<ul> <li>Reproductive System</li> </ul>	107–118

•	Growth, Repair and Aging,		•	Mutation	151–154
	Amniocentesis	119–124	•	Human Population	155–159
•	Chromosomes, Types of Chromosomes, Human Karyotype		•	Classification	160–169
	and Chromosomal Abnormalities and Syndromes. Hormonal, Chromosomal and Genetic		•	Origin of Life, Evolution and Evolution of Man	170–182
	Balance of Sex Determination. Sex Linkage and Sex Linked Inheritance in Man	125–142	•	Protozoan Diseases, Insect Carrying Diseases in Relation to Man, Cancer-Types and	
•	Blood Groups and their Signi-			Cancer Cell	183–195
	ficance, Blood Bank	143–146	•	Wild-life Conservation	196–202
•	Tissue Culture and Genetic Engineering	147–150	•	Pesticides	203–207