

CONTENTS

	Pages
Points to Remember (Unit 1 to 37)	3 – 61
Objective Questions	63 – 185
Unit 1 : Atoms, Molecules and Chemical Arithmetics	65 – 70
Unit 2 : Elements, Their occurrence and Extraction	70 – 72
Unit 3 : States of Matter	72 – 76
Unit 4 : Structure of Atom	77 – 80
Unit 5 : Chemical Families—Periodic Properties	81 – 83
Unit 6 : Chemical-Bonding and Molecular Structure	83 – 87
Unit 7 : Carbon and Its Inorganic Compounds	87 – 90
Unit 8 : Energetics	90 – 93
Unit 9 : Physical and Chemical Equilibria	94 – 99
Unit 10 : Redox-Reactions	99 – 103
Unit 11 : Rates of Chemical Reactions	103 – 108
Unit 12 : Chemistry of Non-metals (I) [H, N, and O]	108 – 111
Unit 13 : Chemistry of Non-metals (II) [B, Si, P, S, Halogens and Noble gases]	111 – 115
Unit 14 : Chemistry of Lighter Metals	115 – 118
Unit 15 : Chemistry of Heavier Metals	119 – 122
Unit 16 : Carbon-Compounds : Structure and shape (s) of Hydrocarbons	122 – 126
Unit 17 : Preparation and Properties of Hydrocarbons	126 – 129
Unit 18 : Purification and Characterisation of Organic Compounds	130 – 132
Unit 19 : Molecules of Life	132 – 132
Unit 20 : Atomic Structure and Chemical Bonding	133 – 133
Unit 21 : The Solid State	133 – 136
Unit 22 : Solution	136 – 141
Unit 23 : Chemical Thermodynamics	141 – 144
Unit 24 : Electrochemistry	144 – 147
Unit 25 : Chemical Kinetics	148 – 151
Unit 26 : Organic Chemistry Based on Functional Groups (I) [Halides and Hydroxy Compounds]	151 – 155
Unit 27 : Organic Chemistry Based on Functional Groups (II) [Ethers,	

Aldehydes, Ketones, Carboxylic acids and their derivatives]	155 – 159
Unit 28 : Organic Chemistry Based on Functional Groups (III) [Cyanides, Isocyanides, Nitrocompounds and Amines]	159 – 162
Unit 29 : Chemistry of Representative Elements	162 - 166
Unit 30 : Transition Metals Including Lanthanides	166 – 168
Unit 31 : Co-ordination Chemistry and Organometallics	169 – 171
Unit 32 : Nuclear Chemistry	172 – 175
Unit 33 : Synthetic and Natural Polymers	175 – 177
Unit 34 : Surface Chemistry	177 – 179
Unit 35 : Biomolecules	180 – 181
Unit 36 : Chemistry of Biological Process	182 – 183
Unit 37 : Chemistry in Action	183 – 185
Assess Yourself	186 – 192
Glossary 193 – 214	
Assess Yourself : Answers	215 – 215