

Contents

<i>Preface to the Second Edition</i>	<i>vii</i>
<i>Preface to the First Edition</i>	<i>ix</i>
Section I: Basic Biochemistry	1
Cell and Subcellular Components, Enzymes, Biochemical Processes Involved in Generation of Energy in Cells	
Section II: Macromolecules	27
Chemistry and Metabolism of Carbohydrates, Chemistry and Metabolism of Lipids, Chemistry and Metabolism of Proteins Metabolism and Homeostasis	
Section III: Molecular Biology	94
Chemistry and Metabolism of Nucleotides, Structure and Functions of Nucleic Acids, Processes of Replication, Transcription and Translation, Gene Mutations and Regulation of Gene Expression, Applications of Molecular Technologies	
Section IV: Nutrition	128
General Nutrition, Vitamins, Minerals	
Section V: Oncogenesis and Immunity	160
Xenobiotics, Oncogenesis, Immunity, Antioxidant Defense System and Oxidative Stress	
Section VI: Clinical Chemistry	191
pH and Acid–Base Balance, Metabolism of Hemoglobin, Organ Function Tests, Water and Electrolytes	
Section VII: ECM	216
Extracellular Matrix	