



Contents

<i>Preface to the Sixth Edition</i>	<i>v</i>
<i>Preface to the First Edition</i>	<i>vii</i>
<i>Index of Competencies</i>	<i>xi</i>
1. Basic Laboratory Practice	1
2. Physical Chemistry	9
3. Carbohydrates	18
4. Lipids	34
5. Proteins	40
6. Polarimetry	54
7. Blood	56
8. Foodstuffs	67
9. Saliva	80
10. Gastric Juice	83
11. Pancreatic Juice	96
12. Bile	98
13. Normal Urine	102
14. Pathological Urine	110
15. Estimation of Glucose in Urine	117
16. Estimation of Total Chlorides in Urine	121
17. Identification of an Unknown Substance of Physiological Importance	122
18. Colorimetry	125

x Practical Biochemistry

19.	Estimation of Blood Glucose	136
20.	Estimation of Serum Cholesterol (Total)	144
21.	Estimation of Serum Uric Acid	149
22.	Estimation of Serum Calcium	152
23.	Estimation of Serum Phosphorus (Inorganic)	155
24.	Estimation of Serum Urea	159
25.	Estimation of Urine Urea	165
26.	Estimation of Blood Non-protein Nitrogen	168
27.	Estimation of Serum Creatinine	171
28.	Estimation of Serum Bilirubin	174
29.	Estimation of Serum Proteins (Total)	179
30.	Estimation of Serum Albumin and Globulin	182
31.	Estimation of Serum Amylase	185
32.	Estimation of Serum Lactate Dehydrogenase	188
33.	Estimation of Serum Glutamate Oxaloacetate Transaminase and Glutamate Pyruvate Transaminase	191
34.	Estimation of Serum Phosphatases	195
35.	Biochemical Examination of Cerebrospinal Fluid	199
36.	Special Techniques	204
37.	Kidney Function Tests	220
38.	Liver Function Tests	228
39.	Objective Structured Practical Examination	233
	<i>Appendices</i>	<i>247</i>
	<i>Index</i>	<i>251</i>