

Contents

<i>Preface</i>	v
<i>List of Contributors</i>	vi
<i>Syllabus</i>	viii
<hr/>	
1. Introduction to Qualitative Analysis	1
2. Qualitative Analysis of Carbohydrates	5
3. Qualitative Analysis of Proteins	10
4. Qualitative Analysis of Amino Acids	14
5. Qualitative Analysis of Lipids	18
6. Collection and Storage of Biological Samples	22
7. Physical Properties of Urine	27
8. Qualitative Analysis of Normal Constituents of Urine	32
9. Qualitative Analysis of Abnormal Constituents of Urine	36
10. Determination of Glucose in Urine	41
11. Determination of Creatinine in Urine	45
12. Determination of Chlorides in Urine	49
13. Determination of Glucose in Blood	52
14. Determination of Creatinine in Blood	56
15. Determination of Cholesterol in Blood	60
16. Determination of Calcium in Blood	64
17. Determination of Urea in Blood	68
18. Determination of Uric Acid in Blood	72
19. Determination of SGOT (AST) and SGPT (ALT) in Blood	76
20. Introduction to Enzymes and Enzyme Activity	81
21. Study of Hydrolysis of Starch by Acid and Salivary Amylase Enzyme	85
<i>Color Plates</i>	89–104

Biochemistry and Clinical Pathology **Course Code: ER20-23P**

1. Qualitative analysis of carbohydrates (4 experiments)
2. Qualitative analysis of Proteins and amino acids (4 experiments)
3. Qualitative analysis of lipids (2 experiments)
4. Qualitative analysis of urine for normal and abnormal constituents (4 experiments)
5. Determination of constituents of urine (glucose, creatinine, chlorides) (2 experiments)
6. Determination of constituents of blood/serum (simulated) (Creatine, glucose, cholesterol, Calcium, Urea, SGOT/SGPT) (5 experiments)
7. Study the hydrolysis of starch from acid and salivary amylase enzyme (1 experiment)