Contents

Section 1: Clinical Chemistry

1. Acid-Base Balance 3
2. Amino Acids 8
3. Blood Gases and Electrolytes 11
4. Core Clinical Chemistry 17
5. Diabetes Mellitus 40
6. Endocrinology 46
7. Enzymology 61
8. Lipids 71
9. Liver Function Tests 76
10. Renal Function and its Evaluation 80
11. SI Units 84
12. Vitamins 87

Section 2: Hematology

13. Bleeding Disorders 99
14. Clinical Hematology 106
15. Immunohematology 145

Section 3: Microbiology

16. Bacteriology 161
17. Cerebrospinal Fluid and Other Body Fluids 188
18. Diagnostic Immunology 200
19. Diagnostic Skin Tests 215
20. Medical Parasitology 219
21. Mycology 259
22. Pregnancy Tests 265
23. Semen Analysis 270

24. Serology 275
25. Sputum Examination 292
26. Stool Examination 298
27. Urine Analysis 302
28. Virology 320

Section 4: Histopathology and Microtechniques

29. Cytogenetics 357
30. Cytology 363
31. Histopathology and Microtechnique 369

Section 5: Molecular Biology

32. Molecular Biology 391

Section 6: Laboratory Safety

33. Laboratory Safety 407
34. Sterilization 423

Section 7: Training

35. Knowledge to be Acquired 427