



Contents

<i>Foreword</i>	<i>vii</i>
<i>Preface</i>	<i>ix</i>
<i>Acknowledgements</i>	<i>xi</i>
<i>Contributors</i>	<i>xiii</i>

PART A: THEORY

Chapter 1. States of Matter	3
Chapter 2. Micromeritics	23
Chapter 3. Pharmaceutical Rheology	65
Chapter 4. Surface and Interfacial Phenomena	99
Chapter 5. Buffers and Isotonic Solutions	141
Chapter 6. Complexation and Protein Binding	161
Chapter 7. Colloidal Dispersions	191
Chapter 8. Pharmaceutical Suspensions	203
Chapter 9. Pharmaceutical Emulsions	223
Chapter 10. Diffusion and Drug Release	249
Chapter 11. Drug Dissolution	263
Chapter 12. Kinetics, Degradation and Stability	285

PART B: PRACTICALS

Experiment 1	Ternary Phase Diagram	333
Experiment 2	Particle Size by Optical Microscopy	336
Experiment 3	Particle Size by Sieving	338
Experiment 4	Flow Property of Powder	341
Experiment 5	Angle of Repose	344
Experiment 6	Density Determination	347
Experiment 7	Ostwald Viscometer	349
Experiment 8	Falling Sphere Viscometer	351
Experiment 9	Spreading Coefficient	353
Experiment 10	Critical Micelle Concentration	355
Experiment 11	Buffer Preparation	358
Experiment 12	Colloidal Solution	360
Experiment 13	Physical Stability of Suspension	361
Experiment 14	Dissolution Profile of Tablet	364
Experiment 15	Kinetics–I	368
Experiment 16	Kinetics–II	372

PART C: MULTIPLE CHOICE QUESTIONS

Multiple Choice Questions (Useful for GPAT Aspirants)	379
MCQ Answer Key	396
<i>Index</i>	397