

CONTENTS

<i>Preface</i>	(v)
EXPERIMENT 1	
Calibration Curve of Salicylic Acid by Colorimetry.....	1
EXPERIMENT 2	
Calibration Curve of Diclofenac Sodium by UV Spectrophotometry	3
EXPERIMENT 3	
Linear Regression and Correlation Coefficient	5
EXPERIMENT 4	
Disintegration of Tablets.....	8
EXPERIMENT 5	
Dissolution of Conventional Tablets	9
EXPERIMENT 6	
Dissolution of Enteric Coated Tablets	11
EXPERIMENT 7	
Dissolution of Sustained Release (SR) Tablets	14
EXPERIMENT 8	
Dissolution Study of Different Dosage Forms	18
EXPERIMENT 9	
Effect of Polymorphism on Drug Dissolution	20

(viii) Contents

EXPERIMENT 10

Effect of Complexation on Solubility and Dissolution Rate .. 23

EXPERIMENT 11

Comparative Dissolution Studies of Marketed Products and
Treatment of Data by using ANOVA 26

EXPERIMENT 12

In vitro Drug Diffusion from Ointment Bases..... 28

EXPERIMENT 13

In vitro Drug Permeation (Diffusion) Study of Ointment 31

EXPERIMENT 14

Protein Binding Studies 33

EXPERIMENT 15

In vitro Drug – Drug Interaction Studies 36

EXPERIMENT 16

Bioavailability and Bioequivalence Studies 38

EXPERIMENT 17

Determination of Creatinine Clearance by
Nomogram Method (Height) 39

EXPERIMENT 18

Determination of Creatinine Clearance by
Nomogram Method (Weight) 42

EXPERIMENT 19

One Compartment Open Model-IV Bolus..... 44

EXPERIMENT 20	
One Compartment Open Model-IV Infusion	53
EXPERIMENT 21	
One Compartment Open Model-Extravascular	56
EXPERIMENT 22	
Two Compartment Open Model-IV Bolus	64
EXPERIMENT 23	
Multidose Injections.....	67
EXPERIMENT 24	
Multidose Extravascular	68
APPENDIX 1	
Definitions.....	69
APPENDIX 2	
Disintegration.....	73
APPENDIX 3	
Dissolution	76
APPENDIX 4	
Diffusion	90
APPENDIX 5	
Kinetic models of drug dissolution	94
APPENDIX 6	
Statistical Techniques	100

(x) Contents

APPENDIX 7

Bioavailability and Bioequivalence Studies 112

APPENDIX 8

Pharmacokinetics 117

APPENDIX 9

Buffers and Reagents 145

APPENDIX 10

Viva-Voce Questions 149