



ESTD-2005

The Jamner Taluka Education Society's

SHREE SURESHDADA JAIN INSTITUTE OF PHARMACEUTICAL EDUCATION & RESEARCH, JAMNER, -424206 DIST- JALGAON (M.S.)

- Approved by PCI, New Delhi & DTE, Mumbai
- Affiliated to K.B.C. N.M.U., Jalgaon
- Courses available :- B.Pharmacy & M. Pharmacy (Pharmaceutics)

Ph. : (02580)233478 Fax (02580)233478,

Website. : www.ssjiiper.com Email :- ssjiiper_jamner@rediffmail.com

3.3.2 Number of Books Published :

Sr No	Name of Teacher	Title of the book/chapters published	ISBN/ISSN No.	Calender Year of publication	Name of the publisher
1	Dr S.D.Barhate	Pharmacology –I	978-93-92-159-22-0	2024	Pee Vee (Books)
2	Mr.Rahul D. Shimpi	Pharmacology –I	978-93-92-159-22-0	2024	Pritam Publication
3	Dr.S.D.Barhate	Pharmaceutical Quality Assurance	97815-43347-46-3	2023	Pee Vee (Books)
4	Mrs.Poonam A.Borse	MCQ In Pharmaceutical Analysis I	97815-43345-33-9	2022	Pee Vee (Books)
5	Dr.S.D.Barhate	MCQ In Pharmaceutical Analysis I	97815-43345-33-9	2022	Pee Vee (Books)
6	Dr Surajj Sarode	Drug Delivery System	97815-43344-56-1	2021	Pee Vee (Books)
7	Dr S.D.Barhate	Regulatory Affairs	97815-43344-53-0	2021	Pee Vee (Books)
8	Mr.Mayur S.Jain	Medicinal Chemistry -III rd	97815-43344-43-1	2020	Pee Vee (Books)
9	Mr.Mayur S.Jain	Cosmetic & Cosmeceuticals	97815-43344-53-1	2021	Pee Vee (Books)
10	Mr.Mayur S.Jain	Pharmacology & Toxicology	97815-43344-57-1	2019	S.vikas & company
11	Mrs. Poonam A salunkhe	Modern Pharmaceutical Analytical Techniques	97815-43343-10-6	2019	Pee Vee (Books)



PRINCIPAL

Shree Sureshdada Jain Inst. of Pharmaceutical Education & Research, Jamner, Dist. Jalgaon



ESTD-2005

The Jamner Taluka Education Society's

**SHREE SURESHDADA JAIN INSTITUTE OF PHARMACEUTICAL
EDUCATION & RESEARCH, JAMNER, -424206 DIST- JALGAON (M.S.)**

- Approved by PCI, New Delhi & DTE, Mumbai
- Affiliated to K.B.C. N.M.U., Jalgaon
- Courses available :- B.Pharmacy & M. Pharmacy (Pharmaceutics)

Ph. : (02580)233478 Fax (02580)233478,

Website. : www.ssjiiper.com Email :- ssjiiper_jamner@rediffmail.com

12	Dr.S.D.Barhate	Modern Pharmaceutical Analytical Techniques	97815- 43343-10-6	2019	Pee Vee (Books)
13	Mrs. Poonam A.Salunkhe	Advanced Instrumentation Techniques	97815- 43343-11-3	2019	Pee Vee (Books)
14	Dr.S.D.Barhate	Advanced Instrumentation Techniques	97815- 43343-11-3	2019	Pee Vee (Books)
15	Mrs.Poonam A salunkhe	Sterile Products	97815- 43343-66-3	2019	Pee Vee (Books)
16	Dr.S.D.Barhate	Sterile Products	97815- 43343-66-3	2019	Pee Vee (Books)
17	Mr.Mayur S.Jain	Health Education & Community Pharmacy	97815- 43344-47-1	2019	Pee Vee (Books)
18	Mr. Mahavir N.Sanghavi	Biopharmaceutics & Pharmacokinetics	978-15- 43343-2-36	2019	Pee Vee (Books)



PRINCIPAL

Shree Sureshdada Jain Inst. of Pharmaceutical
Education & Research, Jamner, Dist. Jalgaon



ESTD-2005

The Jamner Taluka Education Society's

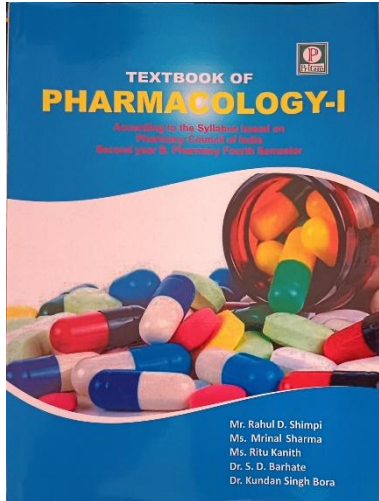
SHREE SURESHDADA JAIN INSTITUTE OF PHARMACEUTICAL EDUCATION & RESEARCH, JAMNER, -424206 DIST- JALGAON (M.S.)

- Approved by PCI, New Delhi & DTE, Mumbai
- Affiliated to K.B.C. N.M.U., Jalgaon
- Courses available :- B.Pharmacy & M. Pharmacy (Pharmaceutics)

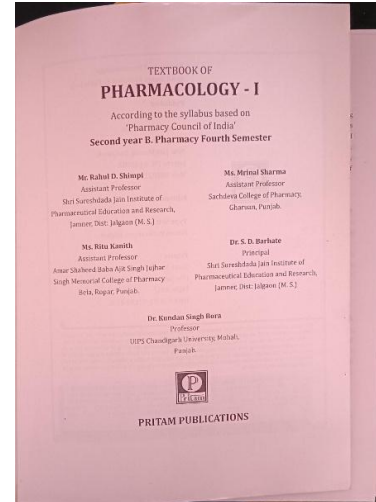
Ph. : (02580)233478 Fax (02580)233478,

Website. : www.ssjiiper.com Email :- ssjiiper_jamner@rediffmail.com

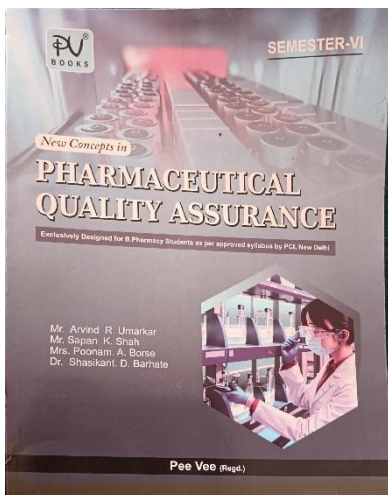
Books Published Year- 2023-24



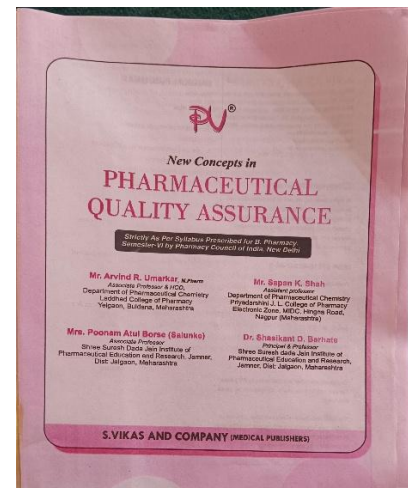
Contents		
Chapter No.	Topics included	Page No.
Preface		
Acknowledgement		
UNIT I: GENERAL PHARMACOLOGY		
1.	INTRODUCTION TO PHARMACOLOGY	1 to 21
1.1	Definition	
1.2	Historical landmarks and scope of pharmacology	
1.3	Nature And Sources of drugs	
1.4	Routes of drug administration	
1.5	Agonist	
1.6	Inverse agonist	
1.7	Antagonist and antagonism	
1.8	Partial agonist	
1.9	Ligand	
1.10	Spare receptor	
1.11	Drug addiction	
1.12	Tolerance	
1.13	Dependence	
1.14	Tachyphylaxis	
1.15	Idiosyncrasy	
1.16	Drug Allergy	
1.17	Adverse effects	
1.18	Pharmacovigilance	
2.	PHARMACOKINETICS (ABSORPTION AND DISTRIBUTION)	22 to 39
2.1	Influence of pH on drug absorption	
2.2	Transport across membranes	



Books Published Year -2023-24



CONTENTS		
UNIT I		Page No.
Chapter 1	Quality Assurance & Quality Management Concepts	1
Chapter 2	Total Quality Management	11
Chapter 3	ICH Guidelines	24
Chapter 4	Quality by design (QbD)	44
Chapter 5	ISO 9000 & ISO 14000	56
Chapter 6	RAAI Accreditation	69
UNIT II		
Chapter 7	Organization & Personnel	75
Chapter 8	FDL/USDS	91
Chapter 9	Equipment & Raw materials	111
UNIT III		
Chapter 10	Quality Control	124
Chapter 11	Good Laboratory Practices	149
UNIT IV		
Chapter 12	Complaints	143
Chapter 13	Document Management in Pharmaceutical Industry	157
UNIT V		
Chapter 14	Container Evaluation	174
Chapter 15	Good Warehousing practices	194
Index (i-iii)		



(Signature)

PRINCIPAL
Shree Sureshdada Jain Inst. of Pharmaceutical Education & Research, Jamner, Dist. Jalgaon



ESTD-2005

The Jamner Taluka Education Society's

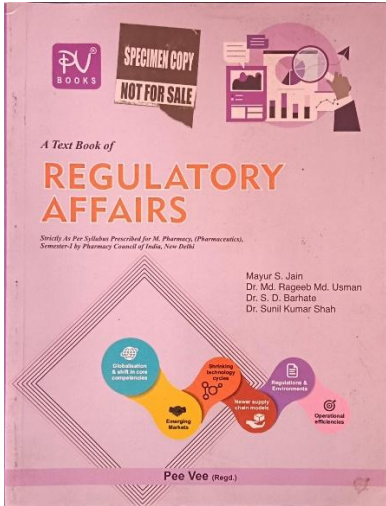
SHREE SURESHDADA JAIN INSTITUTE OF PHARMACEUTICAL EDUCATION & RESEARCH, JAMNER, -424206 DIST- JALGAON (M.S.)

- Approved by PCI, New Delhi & DTE, Mumbai
- Affiliated to K.B.C. N.M.U., Jalgaon
- Courses available :- B.Pharmacy & M. Pharmacy (Pharmaceutics)

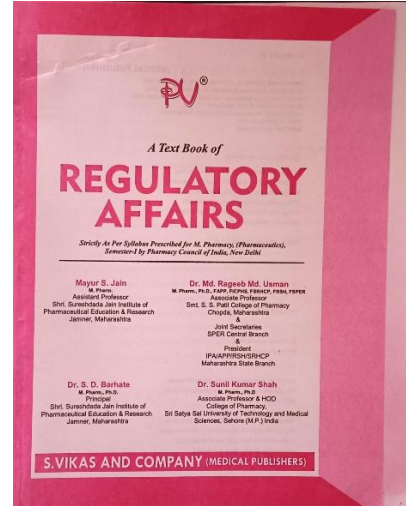
Ph. : (02580)233478 Fax (02580)233478,

Website. : www.ssjiiper.com Email :- ssjiiper_jamner@rediffmail.com

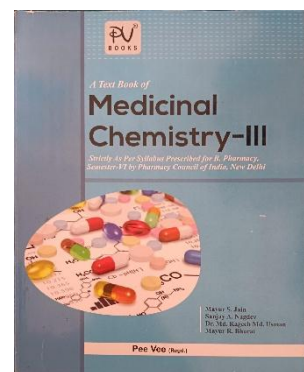
Books Published Year -2021-22



CONTENTS	
Chapter 1	Documentation in Pharmaceutical Industry 1-33
	1.1. Introduction 1, 1.2. Master formula record 2, 1.3. Generic product 4, 1.4. Haskh-waxman act and amendments 6, 1.5. The code of federal regulations (CFR) 10, 1.6. Drug product performance 12, 1.7. Abbreviated new drug application (ANDA) 14, 1.8. De and drug product assessment 17, 1.9. Scale up process approval changes 20
Chapter 2	Regulatory Requirement for Product Approval 34-73
	2.1. Introduction 34, 2.2. Biologics 37, 2.3. New drug application (NDA) 40, 2.4. An abbreviated new drug application (ANDA) 44, 2.5. Us registration for foreign drugs 46, 2.6. Post approval regulatory affairs 51, 2.7. Regulation for combination products 54, 2.8. Medical devices and medical format 55, 2.9. Industry and fda liaison 60
Chapter 3	Non Clinical Drug Development 76-94
	3.1. Introduction 76, 3.2. Global submission 77, 3.3. Investigational new drug (IND) 79, 3.4. Global submission of NDA 82, 3.5. An abbreviated new drug application (ANDA) 87, 3.6. Investigation of medicinal products dossier 90, 3.7. Investigator's brochure (IB) 91
Chapter 4	Clinical trials 95-125
	4.1. Introduction 95, 4.2. Developing clinical trial protocols 96, 4.3. Institutional review boards (IRB) and independent ethics committees (IEC) 102, 4.4. HIPAA-new 110, 4.5. Requirement to clinical study process 112, 4.6. Pharmacovigilance safety monitoring in clinical trials 117
	Bibliography 126
	Index (I-III)

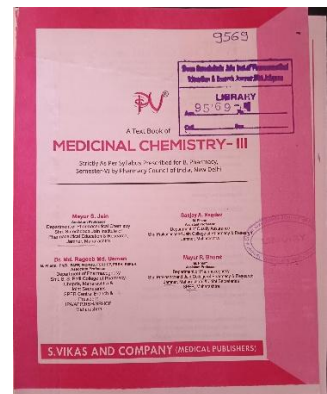


Books Published Year -2020-21



Contents	
Chapter 1	Antibiotics 1-44
	1.1. Introduction 1, 1.2. Classification of Antibiotics 1, 1.3. Beta-lactam antibiotics, 1.4. Aminoglycosides, 1.5. Tetracyclines, 1.6. Macrolides 16, 1.7. Streptogramins
Chapter 2	Phenols 45-52
	2.1. Introduction 45, 2.2. Classification of Phenols 45, 2.3. Phenol 46, 2.4. Salicylic acid 47, 2.5. Resorcinol 48, 2.6. Catechol 49, 2.7. Pyrocatechol 50, 2.8. Resorcinol 51, 2.9. Hydroquinone 52
Chapter 3	Anticancer drugs 53-100
	3.1. Introduction 53, 3.2. Classification of Anticancer drugs 53, 3.3. Alkylating agents 54, 3.4. Antimetabolites 55, 3.5. Topoisomerase II inhibitors 56, 3.6. Mitomycin 57, 3.7. Vinorelbine 58, 3.8. Taxanes 59, 3.9. Anthracyclines 60, 3.10. Platinin 61, 3.11. Steroids 62, 3.12. Hormonal agents 63, 3.13. Immunomodulators 64, 3.14. Natural products 65, 3.15. Targeted therapy 66, 3.16. Anticancer drugs 67, 3.17. Anticancer drugs 68, 3.18. Anticancer drugs 69, 3.19. Anticancer drugs 70, 3.20. Anticancer drugs 71, 3.21. Anticancer drugs 72, 3.22. Anticancer drugs 73, 3.23. Anticancer drugs 74, 3.24. Anticancer drugs 75, 3.25. Anticancer drugs 76, 3.26. Anticancer drugs 77, 3.27. Anticancer drugs 78, 3.28. Anticancer drugs 79, 3.29. Anticancer drugs 80, 3.30. Anticancer drugs 81, 3.31. Anticancer drugs 82, 3.32. Anticancer drugs 83, 3.33. Anticancer drugs 84, 3.34. Anticancer drugs 85, 3.35. Anticancer drugs 86, 3.36. Anticancer drugs 87, 3.37. Anticancer drugs 88, 3.38. Anticancer drugs 89, 3.39. Anticancer drugs 90, 3.40. Anticancer drugs 91, 3.41. Anticancer drugs 92, 3.42. Anticancer drugs 93, 3.43. Anticancer drugs 94, 3.44. Anticancer drugs 95, 3.45. Anticancer drugs 96, 3.46. Anticancer drugs 97, 3.47. Anticancer drugs 98, 3.48. Anticancer drugs 99, 3.49. Anticancer drugs 100
Chapter 4	Anticancer drugs 101-150
	4.1. Introduction 101, 4.2. Classification of Anticancer drugs 101, 4.3. Alkylating agents 102, 4.4. Antimetabolites 103, 4.5. Topoisomerase II inhibitors 104, 4.6. Mitomycin 105, 4.7. Vinorelbine 106, 4.8. Taxanes 107, 4.9. Anthracyclines 108, 4.10. Platinin 109, 4.11. Steroids 110, 4.12. Hormonal agents 111, 4.13. Immunomodulators 112, 4.14. Natural products 113, 4.15. Targeted therapy 114, 4.16. Anticancer drugs 115, 4.17. Anticancer drugs 116, 4.18. Anticancer drugs 117, 4.19. Anticancer drugs 118, 4.20. Anticancer drugs 119, 4.21. Anticancer drugs 120, 4.22. Anticancer drugs 121, 4.23. Anticancer drugs 122, 4.24. Anticancer drugs 123, 4.25. Anticancer drugs 124, 4.26. Anticancer drugs 125, 4.27. Anticancer drugs 126, 4.28. Anticancer drugs 127, 4.29. Anticancer drugs 128, 4.30. Anticancer drugs 129, 4.31. Anticancer drugs 130, 4.32. Anticancer drugs 131, 4.33. Anticancer drugs 132, 4.34. Anticancer drugs 133, 4.35. Anticancer drugs 134, 4.36. Anticancer drugs 135, 4.37. Anticancer drugs 136, 4.38. Anticancer drugs 137, 4.39. Anticancer drugs 138, 4.40. Anticancer drugs 139, 4.41. Anticancer drugs 140, 4.42. Anticancer drugs 141, 4.43. Anticancer drugs 142, 4.44. Anticancer drugs 143, 4.45. Anticancer drugs 144, 4.46. Anticancer drugs 145, 4.47. Anticancer drugs 146, 4.48. Anticancer drugs 147, 4.49. Anticancer drugs 148, 4.50. Anticancer drugs 149, 4.51. Anticancer drugs 150
Chapter 5	Anticancer drugs 151-200
	5.1. Introduction 151, 5.2. Classification of Anticancer drugs 151, 5.3. Alkylating agents 152, 5.4. Antimetabolites 153, 5.5. Topoisomerase II inhibitors 154, 5.6. Mitomycin 155, 5.7. Vinorelbine 156, 5.8. Taxanes 157, 5.9. Anthracyclines 158, 5.10. Platinin 159, 5.11. Steroids 160, 5.12. Hormonal agents 161, 5.13. Immunomodulators 162, 5.14. Natural products 163, 5.15. Targeted therapy 164, 5.16. Anticancer drugs 165, 5.17. Anticancer drugs 166, 5.18. Anticancer drugs 167, 5.19. Anticancer drugs 168, 5.20. Anticancer drugs 169, 5.21. Anticancer drugs 170, 5.22. Anticancer drugs 171, 5.23. Anticancer drugs 172, 5.24. Anticancer drugs 173, 5.25. Anticancer drugs 174, 5.26. Anticancer drugs 175, 5.27. Anticancer drugs 176, 5.28. Anticancer drugs 177, 5.29. Anticancer drugs 178, 5.30. Anticancer drugs 179, 5.31. Anticancer drugs 180, 5.32. Anticancer drugs 181, 5.33. Anticancer drugs 182, 5.34. Anticancer drugs 183, 5.35. Anticancer drugs 184, 5.36. Anticancer drugs 185, 5.37. Anticancer drugs 186, 5.38. Anticancer drugs 187, 5.39. Anticancer drugs 188, 5.40. Anticancer drugs 189, 5.41. Anticancer drugs 190, 5.42. Anticancer drugs 191, 5.43. Anticancer drugs 192, 5.44. Anticancer drugs 193, 5.45. Anticancer drugs 194, 5.46. Anticancer drugs 195, 5.47. Anticancer drugs 196, 5.48. Anticancer drugs 197, 5.49. Anticancer drugs 198, 5.50. Anticancer drugs 199, 5.51. Anticancer drugs 200

Contents	
Chapter 1	Introduction to Drug Design 201-250
	1.1. Historical development and chemistry 201, 1.2. Pharmacological Principles and its OSAR 205, 1.3. Pharmacophore Modeling 215, 1.4. Drug Design 220
Chapter 2	Combinatorial Chemistry 251-290
	2.1. Concept and applications of Combinatorial Chemistry 251, 2.2. Combinatorial synthesis 252, 2.3. Combinatorial synthesis in solution 253, 2.4. Solid phase synthesis 254, 2.5. Parallel synthesis 255, 2.6. Combinatorial synthesis 256, 2.7. Combinatorial synthesis 257, 2.8. Combinatorial synthesis 258, 2.9. Combinatorial synthesis 259, 2.10. Combinatorial synthesis 260, 2.11. Combinatorial synthesis 261, 2.12. Combinatorial synthesis 262, 2.13. Combinatorial synthesis 263, 2.14. Combinatorial synthesis 264, 2.15. Combinatorial synthesis 265, 2.16. Combinatorial synthesis 266, 2.17. Combinatorial synthesis 267, 2.18. Combinatorial synthesis 268, 2.19. Combinatorial synthesis 269, 2.20. Combinatorial synthesis 270, 2.21. Combinatorial synthesis 271, 2.22. Combinatorial synthesis 272, 2.23. Combinatorial synthesis 273, 2.24. Combinatorial synthesis 274, 2.25. Combinatorial synthesis 275, 2.26. Combinatorial synthesis 276, 2.27. Combinatorial synthesis 277, 2.28. Combinatorial synthesis 278, 2.29. Combinatorial synthesis 279, 2.30. Combinatorial synthesis 280, 2.31. Combinatorial synthesis 281, 2.32. Combinatorial synthesis 282, 2.33. Combinatorial synthesis 283, 2.34. Combinatorial synthesis 284, 2.35. Combinatorial synthesis 285, 2.36. Combinatorial synthesis 286, 2.37. Combinatorial synthesis 287, 2.38. Combinatorial synthesis 288, 2.39. Combinatorial synthesis 289, 2.40. Combinatorial synthesis 290
	Bibliography 291-295
	Index 296-300



PRINCIPAL
Shree Sureshdada Jain Inst. of Pharmaceutical Education & Research, Jamner, Dist. Jalgaon

- Approved by PCI, New Delhi & DTE, Mumbai
- Affiliated to K.B.C. N.M.U., Jalgaon
- Courses available :- B.Pharmacy & M. Pharmacy (Pharmaceutics)

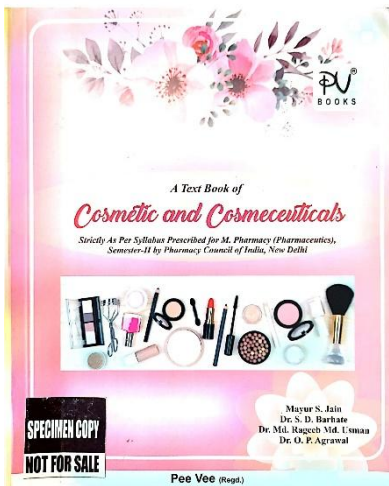
Ph. : (02580)233478 Fax (02580)233478,

Website. : www.ssjiiper.com Email :- ssjiiper_jamner@rediffmail.com



ESTD-2005

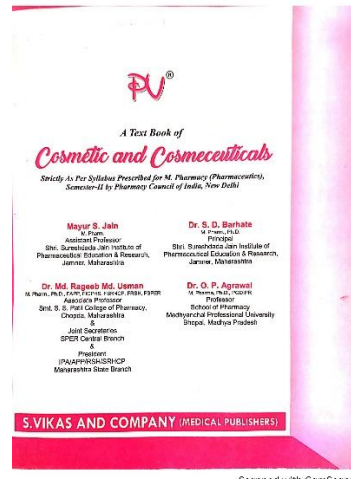
Books Published Year -2020-21



Scanned with CamScanner

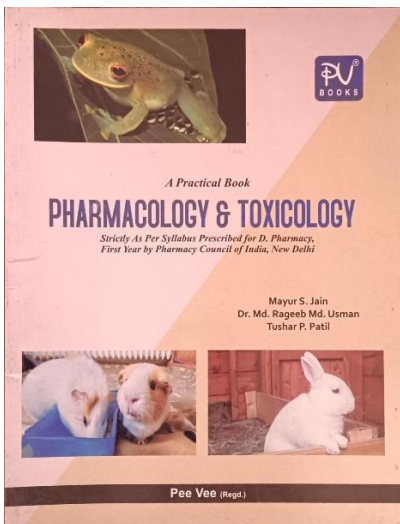
CONTENTS	
Chapter 1	Cosmetic Regulatory 1-15
1.1	Introduction 1, 1.2. Indian regulatory requirements for labeling of cosmetics 2, 1.3. Regulatory provisions relating to import of cosmetics 3, 1.4. Spurious cosmetic 5, 1.5. Regulatory provisions for the manufacturing of cosmetics 7, 1.6. Prohibition of manufacture and sale of certain cosmetics 9, 1.7. Loan license 12, 1.8. Offences and penalties 14
Chapter 2	Cosmetics - Biological Aspects 16-44
2.1	A biological basis for cosmetics 16, 2.2. Structure of hair and hair growth cycle 23, 2.3. Common problems associated with oral cavity 25, 2.4. Cleansing and care needs for face 28,
Chapter 3	Formulation Building Blocks of Cosmetics 45-72
3.1	Building blocks for different product formulations of cosmetics 45, 3.2. Moisturizing cream 48, 3.3. Surfactants classification and application 53, 3.4. Emollients 58, 3.5. Rheological additives 62, 3.6. Antimicrobial used as preservatives, their merits and demerits 64, 3.7. Factors affecting preservative efficacy 66, 3.8. Soaps and syndetbars 69, 3.9. Classification of perfumes & perfume ingredients 70
Chapter 4	Design of Cosmeceutical Products 73-104
4.1	Introduction 73, 4.2. Sun protection 74, 4.3. Sun screen 76, 4.4. Addressing dry skin 80, 4.5. Acne 83, 4.6. Wrinkles 97, 4.7. Prickly heat 88, 4.8. Body odor 91, 4.9. Dandruff 93, 4.10. Dental cavities 96
Chapter 5	Herbal Cosmetics 105-134
5.1	Introduction 105, 5.2. Herbal ingredients used in hair care 109, 5.3. Herbal ingredients used in skin care 110, 5.4. Herbal ingredients used in oral care 113, 5.5. Review of guidelines for herbal cosmetics by private bodies like cosmos 115, 5.6. Challenges in formulating herbal cosmetics 125
	Bibliography 135
	Index (i)

Scanned with CamScanner

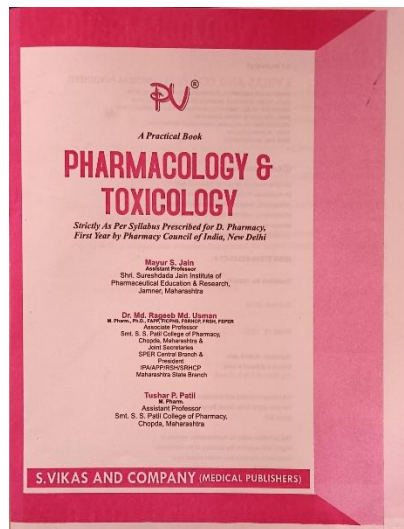


Scanned with CamScanner

Books Published Year -2019-20



CONTENTS	
Experiment No. 1:	To study the effect of adrenalis, acetylcholine, potassium chloride and calcium chloride on isolated frog heart 1
Experiment No. 2:	To study the effect of acetylcholine on rectus abdomens muscle of frog and guinea pig ileum 4
Experiment No. 3:	To study the effect of Spasmogen and relaxans on rabbit intestine 8
Experiment No. 4:	To study the effect of local anaesthetic on rabbit cornea 11
Experiment No. 5:	To study the effect of mydriatics and miotics on rabbit eye 13
Experiment No. 6:	To study the effect of atropine in frog 16
Experiment No. 7:	To study the effect of digitalis on frog heart 18
Experiment No. 8:	To study the effect of hypoxic in mice 21
Experiment No. 9:	To study the effect of convulsants and convulsion in mice 24
Experiment No. 10:	To study the pyrogen testing 27
Experiment No. 11:	To study the Hypnosis potentiating effect of chlorpromazine in mice 31
Experiment No. 12:	To study the effect of diphenhydramine in experimentally produced asthma in guinea pigs 34
	Bibliography 36



(Signature)

PRINCIPAL

Shree Sureshdada Jain Inst. of Pharmaceutical Education & Research, Jamner, Dist. Jalgaon

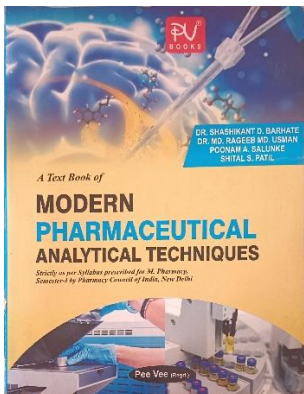
- Approved by PCI, New Delhi & DTE, Mumbai
- Affiliated to K.B.C. N.M.U., Jalgaon
- Courses available :- B.Pharmacy & M. Pharmacy (Pharmaceutics)

Ph. : (02580)233478 Fax (02580)233478,
Website. : www.ssjiپر.com Email :- ssjiپر_jamner@rediffmail.com



ESTD-2005

Books Published Year -2019-20



CONTENTS

Chapter 1 UV Visible Spectroscopy 1-38
1.1 Introduction 1.1.1 Origin and Theory of Ultraviolet Spectroscopy 1.1.2 Principle 1.1.3 Chromophore and related terms A, B Molecular chromophore and auxochrome 1.1.4 Factors affecting Extinction Coefficient 1.1.5 Beer's Law 1.1.6 Lambert's Law 1.1.7 Electronic transitions 1.1.8 Solvent effect 1.1.9 Disadvantages 1.1.10 Applications 1.1

Chapter 2 Infrared Spectroscopy 39-66
2.1 Theory 2.2 Electronic state of a molecule 2.3.1 Description of Infrared Spectroscopy 2.3.2 Factors affecting Extinction Coefficient 2.3.3 Applications 2.3.4 Advantages 2.3.5 Disadvantages 2.3.6 Applications 2.3.7

Chapter 3 Raman Spectroscopy 67-96
3.1 Introduction 3.2.1 Fundamentals of Raman scattering 3.2.2 Stokes and anti-Stokes lines 3.2.3 Raman effect 3.2.4 Applications 3.2.5 Advantages 3.2.6 Disadvantages 3.2.7 Applications 3.2.8

Chapter 4 Atomic Absorption Spectroscopy 97-130
4.1 Introduction 4.2.1 Principle of Atomic Absorption Spectroscopy 4.2.2 Beer's Law 4.2.3 Factors affecting Extinction Coefficient 4.2.4 Applications 4.2.5 Advantages 4.2.6 Disadvantages 4.2.7 Applications 4.2.8

Chapter 5 Atomic Fluorescence Spectroscopy 131-160
5.1 Introduction 5.2.1 Principle of Atomic Fluorescence Spectroscopy 5.2.2 Beer's Law 5.2.3 Factors affecting Extinction Coefficient 5.2.4 Applications 5.2.5 Advantages 5.2.6 Disadvantages 5.2.7 Applications 5.2.8

Chapter 6 Mass Spectrometry 161-200
6.1 Introduction 6.2.1 Principle of Mass Spectrometry 6.2.2 Components of Mass Spectrometer 6.2.3 Applications 6.2.4 Advantages 6.2.5 Disadvantages 6.2.6 Applications 6.2.7

Chapter 7 Gas Chromatography 201-240
7.1 Introduction 7.2.1 Principle of Gas Chromatography 7.2.2 Components of Gas Chromatograph 7.2.3 Applications 7.2.4 Advantages 7.2.5 Disadvantages 7.2.6 Applications 7.2.7

Chapter 8 High Performance Liquid Chromatography (HPLC) 241-280
8.1 Introduction 8.2.1 Principle of HPLC 8.2.2 Components of HPLC 8.2.3 Applications 8.2.4 Advantages 8.2.5 Disadvantages 8.2.6 Applications 8.2.7

Chapter 9 Thin Layer Chromatography (TLC) 281-320
9.1 Introduction 9.2.1 Principle of TLC 9.2.2 Components of TLC 9.2.3 Applications 9.2.4 Advantages 9.2.5 Disadvantages 9.2.6 Applications 9.2.7

Chapter 10 Paper Chromatography 321-360
10.1 Introduction 10.2.1 Principle of Paper Chromatography 10.2.2 Components of Paper Chromatograph 10.2.3 Applications 10.2.4 Advantages 10.2.5 Disadvantages 10.2.6 Applications 10.2.7

Chapter 11 Bioassay 361-400
11.1 Introduction 11.2.1 Principle of Bioassay 11.2.2 Components of Bioassay 11.2.3 Applications 11.2.4 Advantages 11.2.5 Disadvantages 11.2.6 Applications 11.2.7

Chapter 12 Radioimmunoassay (RIA) 401-440
12.1 Introduction 12.2.1 Principle of RIA 12.2.2 Components of RIA 12.2.3 Applications 12.2.4 Advantages 12.2.5 Disadvantages 12.2.6 Applications 12.2.7

Chapter 9 Paper Chromatography 201-240
9.1 Introduction 9.2.1 Principle of Paper Chromatography 9.2.2 Components of Paper Chromatograph 9.2.3 Applications 9.2.4 Advantages 9.2.5 Disadvantages 9.2.6 Applications 9.2.7

Chapter 10 Electrophoresis 241-280
10.1 Introduction 10.2.1 Principle of Electrophoresis 10.2.2 Components of Electrophoresis 10.2.3 Applications 10.2.4 Advantages 10.2.5 Disadvantages 10.2.6 Applications 10.2.7

Chapter 11 Gas Chromatography 281-320
11.1 Introduction 11.2.1 Principle of Gas Chromatography 11.2.2 Components of Gas Chromatograph 11.2.3 Applications 11.2.4 Advantages 11.2.5 Disadvantages 11.2.6 Applications 11.2.7

Chapter 12 High Performance Liquid Chromatography (HPLC) 321-360
12.1 Introduction 12.2.1 Principle of HPLC 12.2.2 Components of HPLC 12.2.3 Applications 12.2.4 Advantages 12.2.5 Disadvantages 12.2.6 Applications 12.2.7

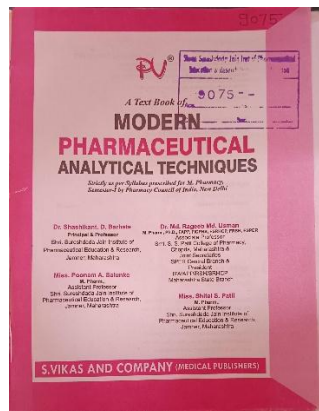
Chapter 13 Ion Exchange Chromatography 361-400
13.1 Introduction 13.2.1 Principle of Ion Exchange Chromatography 13.2.2 Components of Ion Exchange Chromatograph 13.2.3 Applications 13.2.4 Advantages 13.2.5 Disadvantages 13.2.6 Applications 13.2.7

Chapter 14 Mass Spectrometry 401-440
14.1 Introduction 14.2.1 Principle of Mass Spectrometry 14.2.2 Components of Mass Spectrometer 14.2.3 Applications 14.2.4 Advantages 14.2.5 Disadvantages 14.2.6 Applications 14.2.7

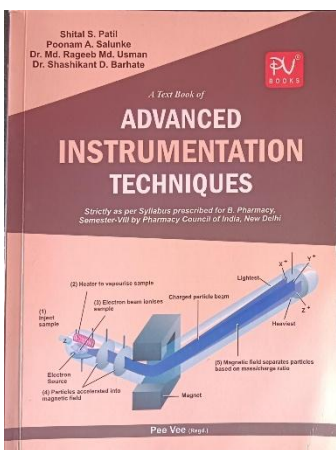
Chapter 15 Affinity Chromatography 441-480
15.1 Introduction 15.2.1 Principle of Affinity Chromatography 15.2.2 Components of Affinity Chromatograph 15.2.3 Applications 15.2.4 Advantages 15.2.5 Disadvantages 15.2.6 Applications 15.2.7

Chapter 16 X-ray Diffraction Method 481-520
16.1 Introduction 16.2.1 Principle of X-ray Diffraction Method 16.2.2 Components of X-ray Diffraction Method 16.2.3 Applications 16.2.4 Advantages 16.2.5 Disadvantages 16.2.6 Applications 16.2.7

Chapter 17 Radioimmunoassay (RIA) 521-560
17.1 Introduction 17.2.1 Principle of RIA 17.2.2 Components of RIA 17.2.3 Applications 17.2.4 Advantages 17.2.5 Disadvantages 17.2.6 Applications 17.2.7



Books Published Year -2019-20



CONTENTS

Chapter 1 Nuclear Magnetic Resonance Spectroscopy 1-27
1.1 Principle 1.2.1 Chemical shift 1.2.2 Factors affecting chemical shift 1.2.3 Spin-spin coupling 1.2.4 Coupling constant 1.2.5 Relaxation 1.2.6 Applications 1.2.7

Chapter 2 Mass Spectrometry 28-42
2.1 Principle 2.2.1 Fragmentation 2.2.2 Ionization techniques 2.2.3 Advantages 2.2.4 Disadvantages 2.2.5 Applications 2.2.6

Chapter 3 Thermal Methods of Analysis 43-57
3.1 Introduction 3.2.1 Thermogravimetric analysis (TGA) 3.2.2 Differential thermal analysis (DTA) 3.2.3 Differential scanning calorimetry (DSC) 3.2.4 Applications 3.2.5

Chapter 4 X-ray Diffraction Methods 58-72
4.1 Introduction 4.2 Theory 4.3 Instrumentation of x-ray crystallography 4.4 Applications of x-ray diffraction methods 4.5

Chapter 5 Calibration and Validation 73-87
5.1 Calibration 5.2.1 Validation as per ICH 5.2.2 Validation as per USP/ FDA guidelines 5.2.3 Applications 5.2.4

Chapter 6 Calibration of Instruments 88-102
6.1 Calibration 6.2.1 Calibration of electronic balances 6.2.2 Calibration of UV-visible spectrophotometer 6.2.3 Calibration of high performance liquid chromatography (HPLC) 6.2.4 Calibration of gas chromatography 6.2.5 Calibration of paper chromatography 6.2.6 Calibration of spectrophotometer 6.2.7 Calibration data plots 6.2.8

Chapter 7 Radioimmunoassay (RIA) 103-117
7.1 Introduction 7.2.1 Principle and procedure 7.2.2 RIA procedure 7.2.3 Applications 7.2.4 Advantages 7.2.5 Disadvantages 7.2.6 Applications 7.2.7

Chapter 8 Extraction Techniques 118-132
8.1 Introduction 8.2.1 Principle of extraction 8.2.2 Methods of liquid-liquid extraction 8.2.3 Applications of liquid-liquid extraction 8.2.4

Chapter 9 Fractionated Techniques 133-147
9.1 Introduction 9.2.1 Column chromatography 9.2.2 Gas chromatography 9.2.3 Thin layer chromatography 9.2.4 Applications 9.2.5

Chapter 10 HPLC 148-162
10.1 Introduction 10.2.1 Principle of HPLC 10.2.2 Components of HPLC 10.2.3 Applications 10.2.4 Advantages 10.2.5 Disadvantages 10.2.6 Applications 10.2.7

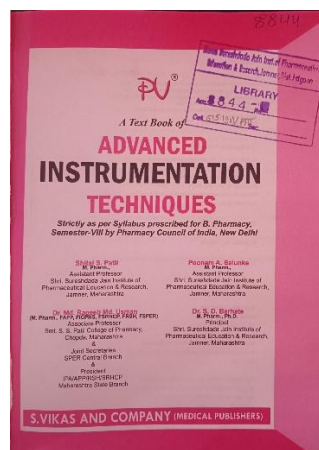
Chapter 11 Ion Exchange Chromatography 163-177
11.1 Introduction 11.2.1 Principle of Ion Exchange Chromatography 11.2.2 Components of Ion Exchange Chromatograph 11.2.3 Applications 11.2.4 Advantages 11.2.5 Disadvantages 11.2.6 Applications 11.2.7

Chapter 12 Mass Spectrometry 178-192
12.1 Introduction 12.2.1 Principle of Mass Spectrometry 12.2.2 Components of Mass Spectrometer 12.2.3 Applications 12.2.4 Advantages 12.2.5 Disadvantages 12.2.6 Applications 12.2.7

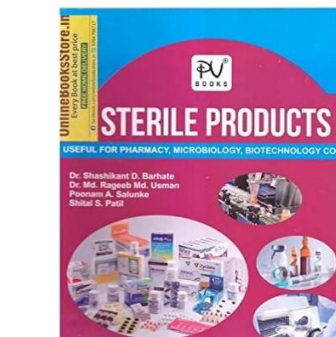
Chapter 13 Affinity Chromatography 193-207
13.1 Introduction 13.2.1 Principle of Affinity Chromatography 13.2.2 Components of Affinity Chromatograph 13.2.3 Applications 13.2.4 Advantages 13.2.5 Disadvantages 13.2.6 Applications 13.2.7

Chapter 14 X-ray Diffraction Method 208-222
14.1 Introduction 14.2.1 Principle of X-ray Diffraction Method 14.2.2 Components of X-ray Diffraction Method 14.2.3 Applications 14.2.4 Advantages 14.2.5 Disadvantages 14.2.6 Applications 14.2.7

Chapter 15 Radioimmunoassay (RIA) 223-237
15.1 Introduction 15.2.1 Principle of RIA 15.2.2 Components of RIA 15.2.3 Applications 15.2.4 Advantages 15.2.5 Disadvantages 15.2.6 Applications 15.2.7



Books Published Year -2019-20



CONTENTS

Chapter 1 Sterile Dosage Forms 1-10
1.1 Introduction 1.2.1 Types of sterile dosage forms 1.2.2 Advantages of sterile dosage forms 1.2.3 Disadvantages of sterile dosage forms 1.2.4 Applications 1.2.5

Chapter 2 Sterile Ointments, Creams and Solutions 11-20
2.1 Introduction 2.2.1 Fundamentals of ointments 2.2.2 Types of ointments 2.2.3 Applications 2.2.4 Advantages 2.2.5 Disadvantages 2.2.6 Applications 2.2.7

Chapter 3 Sterile Emulsions 21-30
3.1 Introduction 3.2.1 Fundamentals of emulsions 3.2.2 Types of emulsions 3.2.3 Applications 3.2.4 Advantages 3.2.5 Disadvantages 3.2.6 Applications 3.2.7

Chapter 4 Sterile Suspensions 31-40
4.1 Introduction 4.2.1 Fundamentals of suspensions 4.2.2 Types of suspensions 4.2.3 Applications 4.2.4 Advantages 4.2.5 Disadvantages 4.2.6 Applications 4.2.7

Chapter 5 Sterile Powders 41-50
5.1 Introduction 5.2.1 Fundamentals of powders 5.2.2 Types of powders 5.2.3 Applications 5.2.4 Advantages 5.2.5 Disadvantages 5.2.6 Applications 5.2.7

Chapter 6 Sterile Injections 51-60
6.1 Introduction 6.2.1 Fundamentals of injections 6.2.2 Types of injections 6.2.3 Applications 6.2.4 Advantages 6.2.5 Disadvantages 6.2.6 Applications 6.2.7

Chapter 7 Sterile Ophthalmics 61-70
7.1 Introduction 7.2.1 Fundamentals of ophthalmics 7.2.2 Types of ophthalmics 7.2.3 Applications 7.2.4 Advantages 7.2.5 Disadvantages 7.2.6 Applications 7.2.7

Chapter 8 Sterile Ear, Nose and Throat Preparations 71-80
8.1 Introduction 8.2.1 Fundamentals of ENT preparations 8.2.2 Types of ENT preparations 8.2.3 Applications 8.2.4 Advantages 8.2.5 Disadvantages 8.2.6 Applications 8.2.7

Chapter 9 Sterile Parenterals 81-90
9.1 Introduction 9.2.1 Fundamentals of parenterals 9.2.2 Types of parenterals 9.2.3 Applications 9.2.4 Advantages 9.2.5 Disadvantages 9.2.6 Applications 9.2.7

Chapter 10 Sterile Ophthalmics 91-100
10.1 Introduction 10.2.1 Fundamentals of ophthalmics 10.2.2 Types of ophthalmics 10.2.3 Applications 10.2.4 Advantages 10.2.5 Disadvantages 10.2.6 Applications 10.2.7

Chapter 11 Sterile Ear, Nose and Throat Preparations 101-110
11.1 Introduction 11.2.1 Fundamentals of ENT preparations 11.2.2 Types of ENT preparations 11.2.3 Applications 11.2.4 Advantages 11.2.5 Disadvantages 11.2.6 Applications 11.2.7

Chapter 12 Sterile Parenterals 111-120
12.1 Introduction 12.2.1 Fundamentals of parenterals 12.2.2 Types of parenterals 12.2.3 Applications 12.2.4 Advantages 12.2.5 Disadvantages 12.2.6 Applications 12.2.7

Chapter 1 Extraction Techniques 118-132
1.1 Introduction 1.2.1 Principle of extraction 1.2.2 Methods of liquid-liquid extraction 1.2.3 Applications of liquid-liquid extraction 1.2.4

Chapter 2 Fractionated Techniques 133-147
2.1 Introduction 2.2.1 Column chromatography 2.2.2 Gas chromatography 2.2.3 Thin layer chromatography 2.2.4 Applications 2.2.5

Chapter 3 HPLC 148-162
3.1 Introduction 3.2.1 Principle of HPLC 3.2.2 Components of HPLC 3.2.3 Applications 3.2.4 Advantages 3.2.5 Disadvantages 3.2.6 Applications 3.2.7

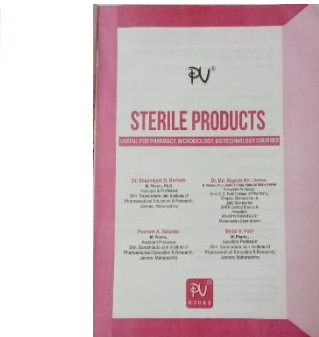
Chapter 4 Ion Exchange Chromatography 163-177
4.1 Introduction 4.2.1 Principle of Ion Exchange Chromatography 4.2.2 Components of Ion Exchange Chromatograph 4.2.3 Applications 4.2.4 Advantages 4.2.5 Disadvantages 4.2.6 Applications 4.2.7

Chapter 5 Mass Spectrometry 178-192
5.1 Introduction 5.2.1 Principle of Mass Spectrometry 5.2.2 Components of Mass Spectrometer 5.2.3 Applications 5.2.4 Advantages 5.2.5 Disadvantages 5.2.6 Applications 5.2.7

Chapter 6 Affinity Chromatography 193-207
6.1 Introduction 6.2.1 Principle of Affinity Chromatography 6.2.2 Components of Affinity Chromatograph 6.2.3 Applications 6.2.4 Advantages 6.2.5 Disadvantages 6.2.6 Applications 6.2.7

Chapter 7 X-ray Diffraction Method 208-222
7.1 Introduction 7.2.1 Principle of X-ray Diffraction Method 7.2.2 Components of X-ray Diffraction Method 7.2.3 Applications 7.2.4 Advantages 7.2.5 Disadvantages 7.2.6 Applications 7.2.7

Chapter 8 Radioimmunoassay (RIA) 223-237
8.1 Introduction 8.2.1 Principle of RIA 8.2.2 Components of RIA 8.2.3 Applications 8.2.4 Advantages 8.2.5 Disadvantages 8.2.6 Applications 8.2.7



PRINCIPAL
Shree Sureshdada Jain Inst. of Pharmaceutical Education & Research, Jamner, Dist. Jalgaon



ESTD-2005

The Jamner Taluka Education Society's

SHREE SURESHDADA JAIN INSTITUTE OF PHARMACEUTICAL EDUCATION & RESEARCH, JAMNER, -424206 DIST- JALGAON (M.S.)

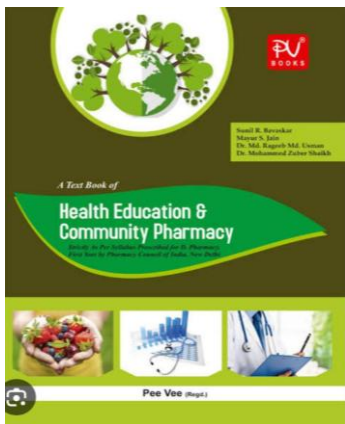
- Approved by PCI, New Delhi & DTE, Mumbai
- Affiliated to K.B.C. N.M.U., Jalgaon
- Courses available :- B.Pharmacy & M. Pharmacy (Pharmaceutics)

Ph. : (02580)233478 Fax (02580)233478,

Website. : www.ssjiپر.com

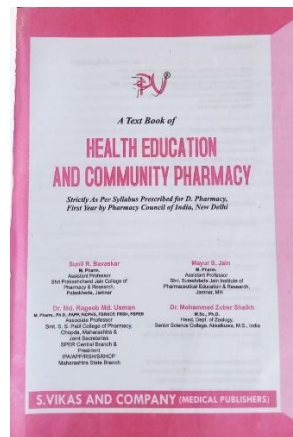
Email :- ssjiپر_jamner@rediffmail.com

Books Published Year -2019-20

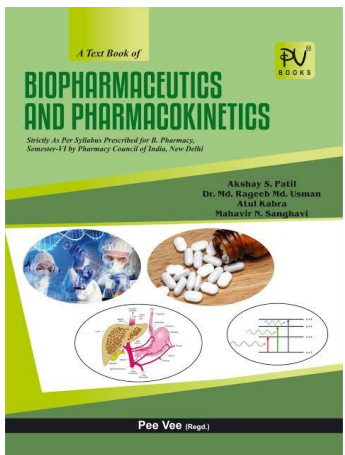


CONTENTS	
Chapter 1: Concept of Health	1-30
1.1 Introduction, 1.2 History, 1.3 Modern health, 1.4 Social health, 1.5 Spiritual health, 1.6 Health insurance, 1.7 Concept of disease, 1.8 Natural history of disease, 1.9 The disease agent	
Chapter 2: Nutrition and Health	31-51
2.1 Introduction, 2.2 Classification and requirements of food, 2.3 Diseases induced due to deficiency of protein, 2.4 Diseases induced due to deficiency of vitamins, 2.5 Vitamin deficiencies, 2.6 Diseases induced due to deficiency of minerals, 2.7 Dehydration and fluid balance, 2.8 Nutritional assessment, 2.9 Nutritional methods	
Chapter 3: First Aid	52-60
3.1 Introduction, 3.2 Evaluation of life saving treatment, 3.3 First aid treatment in accidents, 3.4 First aid treatment in poisoning, 3.5 First aid treatment in burns, 3.6 First aid treatment in snake bites, 3.7 First aid treatment in insect bites, 3.8 First aid treatment in eye injuries, 3.9 First aid treatment in electrical injuries and drowning	
Chapter 4: Environment and Health	61-80
4.1 Introduction, 4.2 Source of water supply, 4.3 Water pollution, 4.4 Purification of water, 4.5 Health and air, 4.6 Noise pollution, 4.7 Light and sound, 4.8 Air pollution, 4.9 Airborne disease, 4.10 Airborne disease	
Chapter 5: Fundamental Principles of Microbiology	81-114
5.1 Introduction, 5.2 Classification of microbe, 5.3 Isolation, staining techniques of organisms of common diseases, 5.4 Isolation techniques for a streak plate, 5.5 Cell staining techniques, 5.6 Control plate techniques in microbiology	
Chapter 6: Communicable Diseases	115-134
6.1 Introduction, 6.2 Characteristics, 6.3 Malaria, 6.4 Typhoid, 6.5 Diphtheria, 6.6 Whooping cough, 6.7 Tuberculosis, 6.8 Cholera, 6.9 Typhus, 6.10 Dengue, 6.11 Measles, 6.12 Rubella, 6.13 Hepatitis, 6.14 HIV/AIDS, 6.15 AIDS, 6.16 HIV/AIDS, 6.17 HIV/AIDS	
Chapter 7: Antisepsis and Disinfection	135-145
7.1 Introduction, 7.2 Disinfection, 7.3 Antisepsis, 7.4 Disinfectants, 7.5 Sterilization, 7.6 Sterilization, 7.7 Heat, 7.8 Radiation, 7.9 Chemical, 7.10 Filtration, 7.11 Ultraviolet light, 7.12 Gamma rays, 7.13 Ionizing radiation, 7.14 Electron beam, 7.15 Microwave, 7.16 Laser, 7.17 Ultrasound, 7.18 High pressure, 7.19 Cold, 7.20 Desiccation, 7.21 Freeze-drying, 7.22 Lyophilization, 7.23 Cryopreservation, 7.24 Cryoprotectants, 7.25 Cryoprotective agents, 7.26 Cryoprotective agents, 7.27 Cryoprotective agents, 7.28 Cryoprotective agents, 7.29 Cryoprotective agents, 7.30 Cryoprotective agents, 7.31 Cryoprotective agents, 7.32 Cryoprotective agents, 7.33 Cryoprotective agents, 7.34 Cryoprotective agents, 7.35 Cryoprotective agents, 7.36 Cryoprotective agents, 7.37 Cryoprotective agents, 7.38 Cryoprotective agents, 7.39 Cryoprotective agents, 7.40 Cryoprotective agents, 7.41 Cryoprotective agents, 7.42 Cryoprotective agents, 7.43 Cryoprotective agents, 7.44 Cryoprotective agents, 7.45 Cryoprotective agents, 7.46 Cryoprotective agents, 7.47 Cryoprotective agents, 7.48 Cryoprotective agents, 7.49 Cryoprotective agents, 7.50 Cryoprotective agents, 7.51 Cryoprotective agents, 7.52 Cryoprotective agents, 7.53 Cryoprotective agents, 7.54 Cryoprotective agents, 7.55 Cryoprotective agents, 7.56 Cryoprotective agents, 7.57 Cryoprotective agents, 7.58 Cryoprotective agents, 7.59 Cryoprotective agents, 7.60 Cryoprotective agents, 7.61 Cryoprotective agents, 7.62 Cryoprotective agents, 7.63 Cryoprotective agents, 7.64 Cryoprotective agents, 7.65 Cryoprotective agents, 7.66 Cryoprotective agents, 7.67 Cryoprotective agents, 7.68 Cryoprotective agents, 7.69 Cryoprotective agents, 7.70 Cryoprotective agents, 7.71 Cryoprotective agents, 7.72 Cryoprotective agents, 7.73 Cryoprotective agents, 7.74 Cryoprotective agents, 7.75 Cryoprotective agents, 7.76 Cryoprotective agents, 7.77 Cryoprotective agents, 7.78 Cryoprotective agents, 7.79 Cryoprotective agents, 7.80 Cryoprotective agents, 7.81 Cryoprotective agents, 7.82 Cryoprotective agents, 7.83 Cryoprotective agents, 7.84 Cryoprotective agents, 7.85 Cryoprotective agents, 7.86 Cryoprotective agents, 7.87 Cryoprotective agents, 7.88 Cryoprotective agents, 7.89 Cryoprotective agents, 7.90 Cryoprotective agents, 7.91 Cryoprotective agents, 7.92 Cryoprotective agents, 7.93 Cryoprotective agents, 7.94 Cryoprotective agents, 7.95 Cryoprotective agents, 7.96 Cryoprotective agents, 7.97 Cryoprotective agents, 7.98 Cryoprotective agents, 7.99 Cryoprotective agents, 8.00 Cryoprotective agents	

Chapter 8: Surfactants	146-156
8.1 Introduction, 8.2 Surfactants, 8.3 Surfactants, 8.4 Surfactants, 8.5 Surfactants, 8.6 Surfactants, 8.7 Surfactants, 8.8 Surfactants, 8.9 Surfactants, 8.10 Surfactants, 8.11 Surfactants, 8.12 Surfactants, 8.13 Surfactants, 8.14 Surfactants, 8.15 Surfactants, 8.16 Surfactants, 8.17 Surfactants, 8.18 Surfactants, 8.19 Surfactants, 8.20 Surfactants, 8.21 Surfactants, 8.22 Surfactants, 8.23 Surfactants, 8.24 Surfactants, 8.25 Surfactants, 8.26 Surfactants, 8.27 Surfactants, 8.28 Surfactants, 8.29 Surfactants, 8.30 Surfactants, 8.31 Surfactants, 8.32 Surfactants, 8.33 Surfactants, 8.34 Surfactants, 8.35 Surfactants, 8.36 Surfactants, 8.37 Surfactants, 8.38 Surfactants, 8.39 Surfactants, 8.40 Surfactants, 8.41 Surfactants, 8.42 Surfactants, 8.43 Surfactants, 8.44 Surfactants, 8.45 Surfactants, 8.46 Surfactants, 8.47 Surfactants, 8.48 Surfactants, 8.49 Surfactants, 8.50 Surfactants, 8.51 Surfactants, 8.52 Surfactants, 8.53 Surfactants, 8.54 Surfactants, 8.55 Surfactants, 8.56 Surfactants, 8.57 Surfactants, 8.58 Surfactants, 8.59 Surfactants, 8.60 Surfactants, 8.61 Surfactants, 8.62 Surfactants, 8.63 Surfactants, 8.64 Surfactants, 8.65 Surfactants, 8.66 Surfactants, 8.67 Surfactants, 8.68 Surfactants, 8.69 Surfactants, 8.70 Surfactants, 8.71 Surfactants, 8.72 Surfactants, 8.73 Surfactants, 8.74 Surfactants, 8.75 Surfactants, 8.76 Surfactants, 8.77 Surfactants, 8.78 Surfactants, 8.79 Surfactants, 8.80 Surfactants, 8.81 Surfactants, 8.82 Surfactants, 8.83 Surfactants, 8.84 Surfactants, 8.85 Surfactants, 8.86 Surfactants, 8.87 Surfactants, 8.88 Surfactants, 8.89 Surfactants, 8.90 Surfactants, 8.91 Surfactants, 8.92 Surfactants, 8.93 Surfactants, 8.94 Surfactants, 8.95 Surfactants, 8.96 Surfactants, 8.97 Surfactants, 8.98 Surfactants, 8.99 Surfactants, 9.00 Surfactants	
Chapter 9: Acquired Immunodeficiency Syndrome (AIDS)	157-167
9.1 Introduction, 9.2 Trichomonas, 9.3 Trichomonas, 9.4 Trichomonas, 9.5 Trichomonas, 9.6 Trichomonas, 9.7 Trichomonas, 9.8 Trichomonas, 9.9 Trichomonas, 9.10 Trichomonas, 9.11 Trichomonas, 9.12 Trichomonas, 9.13 Trichomonas, 9.14 Trichomonas, 9.15 Trichomonas, 9.16 Trichomonas, 9.17 Trichomonas, 9.18 Trichomonas, 9.19 Trichomonas, 9.20 Trichomonas, 9.21 Trichomonas, 9.22 Trichomonas, 9.23 Trichomonas, 9.24 Trichomonas, 9.25 Trichomonas, 9.26 Trichomonas, 9.27 Trichomonas, 9.28 Trichomonas, 9.29 Trichomonas, 9.30 Trichomonas, 9.31 Trichomonas, 9.32 Trichomonas, 9.33 Trichomonas, 9.34 Trichomonas, 9.35 Trichomonas, 9.36 Trichomonas, 9.37 Trichomonas, 9.38 Trichomonas, 9.39 Trichomonas, 9.40 Trichomonas, 9.41 Trichomonas, 9.42 Trichomonas, 9.43 Trichomonas, 9.44 Trichomonas, 9.45 Trichomonas, 9.46 Trichomonas, 9.47 Trichomonas, 9.48 Trichomonas, 9.49 Trichomonas, 9.50 Trichomonas, 9.51 Trichomonas, 9.52 Trichomonas, 9.53 Trichomonas, 9.54 Trichomonas, 9.55 Trichomonas, 9.56 Trichomonas, 9.57 Trichomonas, 9.58 Trichomonas, 9.59 Trichomonas, 9.60 Trichomonas, 9.61 Trichomonas, 9.62 Trichomonas, 9.63 Trichomonas, 9.64 Trichomonas, 9.65 Trichomonas, 9.66 Trichomonas, 9.67 Trichomonas, 9.68 Trichomonas, 9.69 Trichomonas, 9.70 Trichomonas, 9.71 Trichomonas, 9.72 Trichomonas, 9.73 Trichomonas, 9.74 Trichomonas, 9.75 Trichomonas, 9.76 Trichomonas, 9.77 Trichomonas, 9.78 Trichomonas, 9.79 Trichomonas, 9.80 Trichomonas, 9.81 Trichomonas, 9.82 Trichomonas, 9.83 Trichomonas, 9.84 Trichomonas, 9.85 Trichomonas, 9.86 Trichomonas, 9.87 Trichomonas, 9.88 Trichomonas, 9.89 Trichomonas, 9.90 Trichomonas, 9.91 Trichomonas, 9.92 Trichomonas, 9.93 Trichomonas, 9.94 Trichomonas, 9.95 Trichomonas, 9.96 Trichomonas, 9.97 Trichomonas, 9.98 Trichomonas, 9.99 Trichomonas, 10.00 Trichomonas	
Chapter 10: Non-Communicable Diseases	168-185
10.1 Introduction, 10.2 Chronic obstructive pulmonary disease (COPD), 10.3 Diabetes mellitus, 10.4 Obesity, 10.5 Hypertension, 10.6 Stroke, 10.7 Heart failure, 10.8 Cancer, 10.9 Alzheimer's disease, 10.10 Dementia, 10.11 Parkinson's disease, 10.12 Multiple sclerosis, 10.13 Rheumatoid arthritis, 10.14 Osteoarthritis, 10.15 Osteoporosis, 10.16 Gout, 10.17 Hemophilia, 10.18 Sickle cell anemia, 10.19 Phenylketonuria, 10.20 Tay-Sachs disease, 10.21 Huntington's disease, 10.22 Fragile X syndrome, 10.23 Duchenne's muscular dystrophy, 10.24 Cystic fibrosis, 10.25 Sickle cell anemia, 10.26 Phenylketonuria, 10.27 Tay-Sachs disease, 10.28 Huntington's disease, 10.29 Fragile X syndrome, 10.30 Duchenne's muscular dystrophy, 10.31 Cystic fibrosis, 10.32 Sickle cell anemia, 10.33 Phenylketonuria, 10.34 Tay-Sachs disease, 10.35 Huntington's disease, 10.36 Fragile X syndrome, 10.37 Duchenne's muscular dystrophy, 10.38 Cystic fibrosis, 10.39 Sickle cell anemia, 10.40 Phenylketonuria, 10.41 Tay-Sachs disease, 10.42 Huntington's disease, 10.43 Fragile X syndrome, 10.44 Duchenne's muscular dystrophy, 10.45 Cystic fibrosis, 10.46 Sickle cell anemia, 10.47 Phenylketonuria, 10.48 Tay-Sachs disease, 10.49 Huntington's disease, 10.50 Fragile X syndrome, 10.51 Duchenne's muscular dystrophy, 10.52 Cystic fibrosis, 10.53 Sickle cell anemia, 10.54 Phenylketonuria, 10.55 Tay-Sachs disease, 10.56 Huntington's disease, 10.57 Fragile X syndrome, 10.58 Duchenne's muscular dystrophy, 10.59 Cystic fibrosis, 10.60 Sickle cell anemia, 10.61 Phenylketonuria, 10.62 Tay-Sachs disease, 10.63 Huntington's disease, 10.64 Fragile X syndrome, 10.65 Duchenne's muscular dystrophy, 10.66 Cystic fibrosis, 10.67 Sickle cell anemia, 10.68 Phenylketonuria, 10.69 Tay-Sachs disease, 10.70 Huntington's disease, 10.71 Fragile X syndrome, 10.72 Duchenne's muscular dystrophy, 10.73 Cystic fibrosis, 10.74 Sickle cell anemia, 10.75 Phenylketonuria, 10.76 Tay-Sachs disease, 10.77 Huntington's disease, 10.78 Fragile X syndrome, 10.79 Duchenne's muscular dystrophy, 10.80 Cystic fibrosis, 10.81 Sickle cell anemia, 10.82 Phenylketonuria, 10.83 Tay-Sachs disease, 10.84 Huntington's disease, 10.85 Fragile X syndrome, 10.86 Duchenne's muscular dystrophy, 10.87 Cystic fibrosis, 10.88 Sickle cell anemia, 10.89 Phenylketonuria, 10.90 Tay-Sachs disease, 10.91 Huntington's disease, 10.92 Fragile X syndrome, 10.93 Duchenne's muscular dystrophy, 10.94 Cystic fibrosis, 10.95 Sickle cell anemia, 10.96 Phenylketonuria, 10.97 Tay-Sachs disease, 10.98 Huntington's disease, 10.99 Fragile X syndrome, 11.00 Duchenne's muscular dystrophy	
Chapter 11: Epidemiology	186-205
11.1 Introduction, 11.2 Scope of epidemiology, 11.3 Methods of epidemiology, 11.4 Use of epidemiology, 11.5 Dynamics of disease transmission, 11.6 Immunity and immunization, 11.7 Immunological products and their uses, 11.8 Principles of disease control and prevention, 11.9 Hospital acquired infection, 11.10 Nosocomial infection, types of disinfection procedures	
Bibliography	206-207
Index	(i)

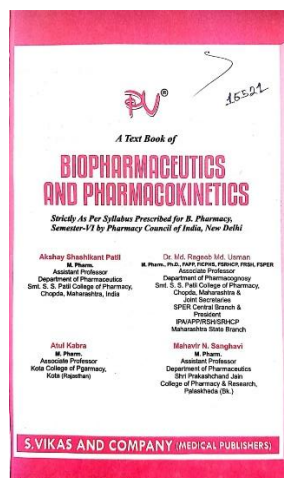


Books Published Year -2019-20



CONTENTS	
Chapter 1: Absorption	1-22
1.1 Introduction, 1.2 Absorption, 1.3 Mechanisms of drug absorption through GI, 1.4 Factors influencing drug absorption through GI, 1.5 Physicochemical factors, 1.6 Physiological factors, 1.7 Pharmaceutical formulation factors, 1.8 Absorption of drug from non-peroral extravascular routes	
Chapter 2: Distribution	23-43
2.1 Introduction, 2.2 Tissue permeability of drugs, 2.3 Binding of drugs, 2.4 Apparent volume of drug distribution, 2.5 Plasma and tissue protein binding of drugs, 2.6 Factors affecting protein-drug binding, 2.7 Kinetics of protein binding, 2.8 Clinical significance of protein binding of drugs	
Chapter 3: Elimination	44-59
3.1 Introduction, 3.2 Drug metabolism and basic understanding metabolic pathways, 3.3 Phase I reactions, 3.4 Phase II (synthetic reactions), 3.5 Factors affecting drug metabolism, 3.6 Renal excretion, 3.7 Factors affecting renal excretion of drugs, 3.8 Clearance, 3.9 Non-renal routes of drug excretion of drugs	
Chapter 4: Bioavailability and Bioequivalence	60-83
4.1 Introduction, 4.2 Definition and objectives of bioavailability, 4.3 Absolute and relative bioavailability, 4.4 Measurement of bioavailability, 4.5 In-vitro drug dissolution models, 4.6 In-vitro-in-vivo correlations, 4.7 Bioequivalence studies, 4.8 Bioavailability of poorly soluble drugs	
Chapter 5: Pharmacokinetics	84-154
5.1 Definition and introduction to pharmacokinetics, 5.2 Compartment models, 5.3 Mechanistic model, 5.4 Physiological models, 5.5 Non-compartment models, 5.6 One-compartment open model, 5.7 Intravenous injection, 5.8 Oral administration, 5.9 Intravenous infusion, 5.10 Intravascular administration	

Chapter 6: Multi-compartment Models	155-166
6.1 Introduction, 6.2 Two-compartment open model (IV bolus), 6.3 Kinetics of multiple dosing, 6.4 Steady state drug levels, 6.5 Calculation of loading and maintenance doses and their significance in clinical setting	
Chapter 7: Nonlinear Pharmacokinetics	167-174
7.1 Introduction, 7.2 Non-linearity, 7.3 Factors causing non-linearity, 7.4 Michaelis-menten method of estimating parameters, 7.5 Elimination with example of drugs	
Bibliography	(ii)
Index	(iii)



PRINCIPAL
Shree Sureshdada Jain Inst. of Pharmaceutical Education & Research, Jamner, Dist. Jalgaon