

TEXTBOOK OF PHARMACEUTICAL INORGANIC AND ANALYTICAL CHEMISTRY

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PREFACE

Pharmaceutical Inorganic Chemistry is an essential subject in the Bachelor of Pharmacy (B.Pharm) curriculum, providing students with a fundamental understanding of the chemical principles, properties, applications and pharmaceutical significance of inorganic substances. A sound knowledge of this subject is important for understanding the role of inorganic compounds in pharmaceutical formulations, therapeutic applications, quality control and healthcare.

This book has been developed with the objective of presenting the concepts of Pharmaceutical Inorganic Chemistry in a clear, systematic and comprehensive manner. The content is organised according to the prescribed syllabus and is designed to support both conceptual learning and examination preparation. Particular emphasis has been placed on explaining the chemistry of pharmaceutical compounds, their methods of preparation, properties, identification tests, purity requirements, pharmaceutical uses and relevant chemical reactions.

The book covers a wide range of topics, including acid–base concepts, buffers, electrolytes, gastrointestinal agents, antimicrobials, radiopharmaceuticals, expectorants, haematinics, antidotes and astringents. Important equations, illustrative examples, comparison tables and structured explanations have been incorporated to help students understand complex concepts and establish connections between theoretical chemistry and pharmaceutical practice.

In addition to detailed subject matter, the book includes important examination-oriented questions, short notes, revision points and other learning aids to facilitate effective preparation and reinforce key concepts. The presentation is intended to be useful not only for B.Pharm students but also for teachers and readers seeking a structured reference to pharmaceutical inorganic chemistry.

It is sincerely hoped that this book will serve as a valuable learning resource, encourage scientific curiosity and help students develop a strong foundation in the subject. Suggestions and constructive feedback from readers and educators will be greatly appreciated and will help improve future editions.

 Author

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The completion of this book has been made possible through the knowledge, guidance, encouragement and support of many individuals and academic resources.

I express my sincere gratitude to the teachers, subject experts, researchers and authors whose contributions to pharmaceutical chemistry and pharmacy education have provided the academic foundation for this work. Their scholarly contributions have been invaluable in developing and organising the concepts presented in this book.

I am grateful to the academic institutions, educators and the broader pharmacy teaching community for their continued efforts in making pharmaceutical education more accessible, practical and relevant to the evolving needs of the healthcare sector.

I would also like to acknowledge the importance of the prescribed B.Pharm curriculum, pharmacopoeial references, standard textbooks and other educational resources that have guided the selection and presentation of the subject matter.

My heartfelt thanks go to my family, friends and well-wishers for their patience, encouragement and constant support throughout the preparation of this book.

Finally, I extend my sincere appreciation to all students and readers who choose this book as part of their academic journey. Their interest in learning and commitment to pharmaceutical sciences are the inspiration behind this effort.

 *Author*

CONTENTS

CHAPTER ONE: INTRODUCTION TO PHARMACEUTICAL ANALYSIS, ERRORS, IMPURITIES AND LIMIT TESTS..... 1

1.1.	INTRODUCTION TO PHARMACEUTICAL ANALYSIS	1
1.2.	METHODS OF EXPRESSING STRENGTH OF SOLUTIONS	3
1.3.	STANDARD SOLUTIONS	6
1.4.	ERRORS IN PHARMACEUTICAL ANALYSIS	8
1.5.	SIGNIFICANT FIGURES	11
1.6.	IMPURITIES IN PHARMACEUTICAL SUBSTANCES	12
1.7.	LIMIT TESTS – GENERAL PRINCIPLE	15
1.8.	LIMIT TEST FOR CHLORIDE	16
1.9.	LIMIT TEST FOR SULPHATE	17
1.10.	LIMIT TEST FOR IRON	17

CHAPTER TWO: ACIDS, BASES AND BUFFER SYSTEMS & MAJOR EXTRA- AND INTRACELLULAR ELECTROLYTES..... 19

2.1.	Introduction	19
2.2.	Concepts of Acids and Bases	20
2.3.	Strong and Weak Acids and Bases	22
2.4.	pH, pOH and Their Significance	23
2.5.	Pharmaceutical Importance of pH	23
2.6.	Buffer Solutions	24
2.7.	Mechanism of Buffer Action	25
2.8.	Henderson–Hasselbalch Equation	25
2.9.	Buffer Capacity and Buffer Range	26
2.10.	Pharmaceutical Applications of Buffers	27
2.11.	Biological Buffer Systems	28
2.12.	Electrolytes: Definition and Importance	29
2.13.	Body Fluid Compartments	29
2.14.	Major Physiological Ions	30

2.15.	<i>Electrolytes Used in Replacement Therapy.....</i>	32
2.16.	<i>Oral Rehydration Salts (ORS).....</i>	33
2.17.	<i>Physiological Acid–Base Balance</i>	34
2.18.	<i>Acidosis and Alkalosis</i>	35

CHAPTER THREE: ACID–BASE, NON-AQUEOUS, PRECIPITATION AND COMPLEXOMETRIC

TITRATIONS	37
3.1. <i>ACID–BASE TITRATIONS</i>	37
3.2. <i>NON-AQUEOUS TITRATIONS</i>	42
3.3. <i>PRECIPITATION TITRATIONS.....</i>	46
3.4. <i>COMPLEXOMETRIC TITRATIONS.....</i>	51

CHAPTER FOUR: GASTROINTESTINAL AGENTS, ANTIMICROBIALS AND RADIOPHARMACEUTICALS

4.1.	<i>Introduction to Gastrointestinal Agents.....</i>	57
4.2.	<i>Acidifiers.....</i>	57
4.3.	<i>Sodium Acid Phosphate.....</i>	58
4.4.	<i>Dilute Hydrochloric Acid.....</i>	59
4.5.	<i>Antacids.....</i>	59
4.6.	<i>Sodium Bicarbonate.....</i>	61
4.7.	<i>Aluminium Hydroxide Gel.....</i>	62
4.8.	<i>Magnesium Hydroxide</i>	62
4.9.	<i>Antacid Combinations.....</i>	63
4.10.	<i>Agents that Promote Bowel Movements</i>	64
4.11.	<i>Magnesium Hydroxide as a Laxative</i>	64
4.12.	<i>Sodium Orthophosphate</i>	64
4.13.	<i>Sodium Potassium Tartrate.....</i>	65
4.14.	<i>Magnesium Trisilicate.....</i>	65
4.15.	<i>Introduction.....</i>	65
4.16.	<i>Mechanisms of Inorganic Antimicrobial Action</i>	66
4.17.	<i>Potassium Permanganate</i>	66

4.18.	<i>Boric Acid</i>	67
4.19.	<i>Hydrogen Peroxide</i>	68
4.20.	<i>Chlorinated Lime</i>	68
4.21.	<i>Iodine and Its Preparations</i>	69
4.22.	<i>Comparison of Important Antimicrobial Agents</i>	70
4.23.	<i>Introduction to Radioactivity</i>	71
4.24.	<i>Basic Types of Radiation</i>	71
4.25.	<i>Radioactive Decay and Half-Life</i>	72
4.26.	<i>Measurement of Radioactivity</i>	73
4.27.	<i>Applications of Radioisotopes</i>	73
4.28.	<i>Sodium Iodide I-131</i>	74

CHAPTER FIVE: MISCELLANEOUS INORGANIC PHARMACEUTICAL COMPOUNDS 75

5.1.	<i>Introduction</i>	76
5.2.	<i>Expectorants</i>	76
5.3.	<i>Potassium Iodide</i>	76
5.4.	<i>Ammonium Chloride</i>	78
5.5.	<i>Comparison of Expectorants</i>	79
5.6.	<i>Emetics</i>	79
5.7.	<i>Copper Sulphate</i>	79
5.8.	<i>Sodium Potassium Tartrate</i>	80
5.9.	<i>Haematinics</i>	81
5.10.	<i>Ferrous Sulphate</i>	81
5.11.	<i>Ferrous Gluconate</i>	82
5.12.	<i>Comparison of Ferrous Salts</i>	83
5.13.	<i>Poison and Antidote – Definitions</i>	83
5.14.	<i>Classification of Antidotes</i>	84
5.15.	<i>Sodium Thiosulphate</i>	84
5.16.	<i>Activated Charcoal</i>	86
5.17.	<i>Sodium Nitrite</i>	86
5.18.	<i>General Management Principles in Poisoning</i>	87
5.19.	<i>Astringents</i>	88

5.20.	<i>Zinc Sulphate</i>	<i>88</i>
5.21.	<i>Potash Alum</i>	<i>88</i>
5.22.	<i>Comparison of Astringents.....</i>	<i>89</i>
5.23.	<i>Important Chemical and Pharmaceutical Concepts.....</i>	<i>89</i>
5.24.	<i>Important Differences for Examination.....</i>	<i>90</i>
5.25.	<i>High-Yield Exam Points.....</i>	<i>91</i>
5.26.	<i>Important Equations and Reactions.....</i>	<i>92</i>