



PLAN ZERO-UG Centric

FREE Pack Unlimited Period

Shape your career for a bright future

ADDITIONAL OFFER
2in1
APPROACH
UG से NORCET तक

PLAN C-NORCET Centric

30 Days FREE Subscription of PAID Content

Any of **MM-Individual Pack**



LOOKinside



Essentials of

Nutrition and Biochemistry

for BSc Nursing Students

As per the syllabus of INC for BSc Nursing

Special Features

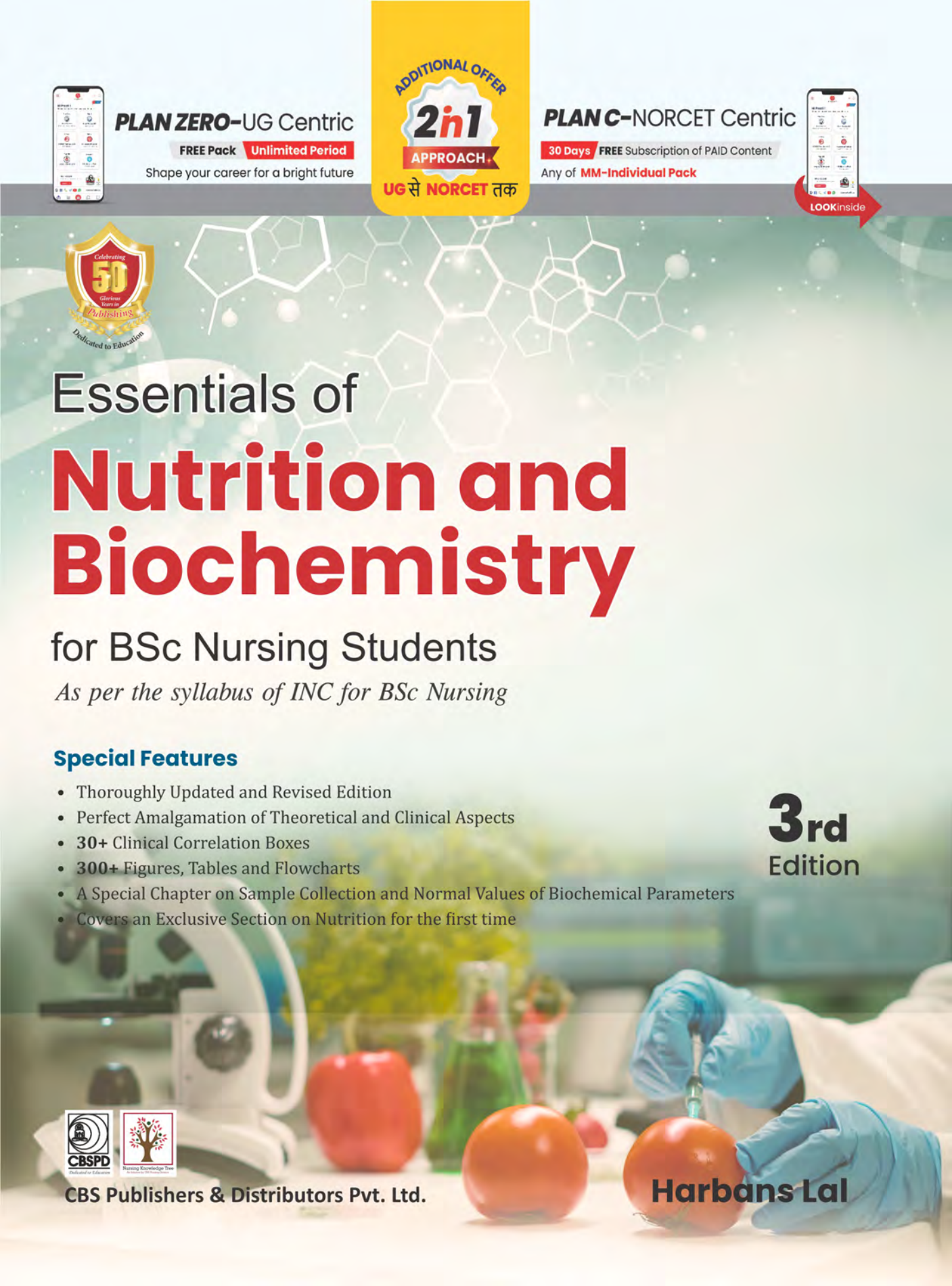
- Thoroughly Updated and Revised Edition
- Perfect Amalgamation of Theoretical and Clinical Aspects
- **30+** Clinical Correlation Boxes
- **300+** Figures, Tables and Flowcharts
- A Special Chapter on Sample Collection and Normal Values of Biochemical Parameters
- Covers an Exclusive Section on Nutrition for the first time

3rd
Edition



CBS Publishers & Distributors Pvt. Ltd.

Harbans Lal



Contents

<i>Preface</i>	v
<i>Acknowledgments</i>	vii
<i>Special Features of the Book</i>	xiii
<i>Syllabus</i>	xv

Section A Nutrition

Unit I Introduction to Nutrition

Chapter 1 Nutrition and its Importance	5
--	---

Unit II Carbohydrates

Chapter 2 Carbohydrates and their Significance	21
--	----

Unit III Fats

Chapter 3 Fats or Lipids	35
--------------------------------	----

Unit IV Proteins

Chapter 4 Composition of Proteins	53
---	----

Unit V Energy

Chapter 5 Energy	63
------------------------	----

Unit VI Vitamins

Chapter 6 Vitamins and their Significance	73
---	----

Unit VII Minerals

Chapter 7 Minerals and their Significance	93
---	----

Unit VIII Water and Electrolytes

Chapter 8 Importance of Water and Electrolytes	117
--	-----

Unit IX Cookery Rules and Preservation of Nutrients

Chapter 9 Principles of Cooking and Preservations of Nutrients	129
Chapter 10 Safe Food Handling	135
Chapter 11 Storage of Food and Food Preservation	145
Chapter 12 Food Adulteration and Food Standards	153
Chapter 13 Preparation of Simple Beverages and Different Types of Foods	157

Unit X Balanced Diet

Chapter 14 Planning Balanced Diet	163
Chapter 15 Planning Menu and Budgeting of Food	183
Chapter 16 Therapeutic Diets	187

Unit XI Role of Nurse in Nutritional Programmes

Chapter 17 National Nutrition Programs	201
Chapter 18 National and International Agencies Working toward Food and Nutrition	211
Chapter 19 Assessment of Nutrition Status	215
Chapter 20 Nutrition Education	221

Section B Biochemistry**Unit I Introduction**

Chapter 1 Introduction to Biochemistry and its Significance	229
Chapter 2 Cell and its Structure	231
Chapter 3 Cell Membrane: Structure and Functions	241
Chapter 4 Transport Mechanisms: Passive and Active Transport	249

Unit II Carbohydrates

Chapter 5 Metabolism of Carbohydrates	263
---	-----

Unit III Lipids

Chapter 6 Metabolism of Lipids	307
--------------------------------------	-----

Unit IV Amino Acids and Proteins

Chapter 7 Metabolism of Amino Acids and Proteins	345
--	-----

Unit V Enzymes

Chapter 8 Clinical Enzymology	389
-------------------------------------	-----

Unit VI Vitamins and Minerals

Chapter 9 Vitamins	411
Chapter 10 Minerals	423

Unit VII Acid Base Balance

Chapter 11 Acid Base Balance	435
------------------------------------	-----

Unit VIII Function Tests

Chapter 12 Organ Function Tests	449
---------------------------------------	-----

Unit IX Metabolism of Hemoglobin

Chapter 13 Metabolism of Hemoglobin	469
---	-----

Unit X Immunochemistry

Chapter 14 Immunochemistry	479
Chapter 15 Free Radicals and Antioxidants	499

<i>Index</i>	503
--------------------	-----

Essentials of **Nutrition and Biochemistry** for BSc Nursing Students

Salient Features

- This book endeavors to convey knowledge of the age-old principles of biochemistry supplemented with the modern developments in a simple, precise and lucid manner.
- The book has been divided into two Sections—Nutrition and Biochemistry—strictly as per the INC syllabus.
- Nutrition section had been included in this new edition for the first time.
- The content has been thoroughly revised and updated so as to give a recent concept of subject to the nursing students, including the significance of Nutrition and Biochemistry in this field.
- The chapters are well-illustrated with easy-to-reproduce figures and tables keeping in mind the pattern of the syllabus.
- Most essential chemical structures have been elucidated in-between the text for better understanding.
- Clinical correlation boxes have been added at various places in the text to help the students understand the clinical relevance of the subject.
- Chapters are studded with frequently asked questions under Assess Yourself Section for self-evaluation.
- Important terms and points have been highlighted throughout the chapters.

About the Author

Harbans Lal *PhD, FACBI, FSOBSI, FIAO*, joined Medical College, Rohtak (Haryana), presently Postgraduate Institute of Medical Sciences, Pt BD Sharma University of Health Sciences, Rohtak (Haryana) as a Lecturer in Biochemistry and after nearly 34 years of service, retired in 2009 from the same institution as Senior Professor. Thereafter, he joined the Department of Biochemistry at Maharaja Agrasen Medical College, Agroha, Hisar (Haryana) as a Senior Professor and Head, from where he retired in July 2017. During this period, he supervised a large number of PhD and MD students, wrote 9 textbooks and published more than 150 research papers in various National and International Journals. He is also a peer reviewer of several National and International Research Journals.

The author has also been a visiting faculty at Louisiana State University Medical Centre, New Orleans, USA; Department of Biosciences, MD University, Rohtak; and Swami Dayanand Postgraduate Institute of Pharmaceutical Sciences, Pt BD Sharma University of Health Sciences, Rohtak. He is a life member of several Scientific Bodies, including Nutrition Society of India, Association of Clinical Biochemists of India, International Federation of Clinical Chemistry, Society of Biological Chemists of India, Society of Biological Scientists of India, and Laboratory Animal Scientists Association. He is also a recipient of several National and International awards, including Nutrition Society of India's Young Scientists Award, World Health Organization Fellowship Award, Fellowship of the Association of Clinical Biochemists of India, Fellowship of the Society of Biological Scientists of India, Seth GS Medical College & KEM Hospital Oration Award, and Best Teacher Award for Excellence in Teaching from Postgraduate Institute of Medical Sciences, Rohtak.



Scan the QR Code to Download the **UPDATED**
CBS Nursing
Catalogue 2022-23



CBS Publishers & Distributors Pvt. Ltd.

4819/XI, Prahlad Street, 24 Ansari Road, Daryaganj, New Delhi 110 002, India

E-mail: feedback@cbspd.com, Website: www.cbspd.com

New Delhi | Bengaluru | Chennai | Kochi | Kolkata | Lucknow | Mumbai | Pune

Hyderabad | Nagpur | Patna | Vijayawada

ISBN: 978-81-948693-7-5



9 788194 869375