

PREFACE TO THE SECOND EDITION

Biochemistry is the fascinating science, the basis of medicine which is extensively useful to understand the diseases at molecular level.

We are glad to bring out the second edition of the book *An Easy Guide for Practical Biochemistry* for medical students as the book has been well-received by student community.

We sincerely acknowledge the students as they are the ones who arouse interest in us to bring the need-based material.

The book is written with the objective of providing knowledge of biochemistry practicals in simple English with colored depiction of all tests with the principle, procedure and clinical importance of each experiment. Points to remember under each chapter highlights the importance and clinical orientation. These points are not only helpful for viva examination but also help them in their pursuit of knowledge in clinical study and patient care in their future endeavor.

The principle of this book is mainly to give a comprehensive glimpse on case studies and charts to understand biochemical basis of disorders, to correlate and interpret with clinical symptoms.

Some chapters have been revised and updated. Additional case studies have been included in this edition. Each case study is accompanied with set of questions for the students to probe the answers. Our genuine concern is to help the medicos to orient the study to the clinical aspects of the subject and to put forth the fact that the *Basic Knowledge of Biochemistry* is essential to understand diseases at molecular

level and to probe into patients health problems based on the clinical manifestations.

An Appendix on Objective Structured Practical Examination (OSPE), the objective way of examination by which competence, practical and analytical approach of the student is evaluated, has been introduced giving an insight into the pattern of conduction.

Few examples for procedure stations and response stations have been explained.

Suggestions, constructive criticisms and comments are most welcome to improve the contents of the book.

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Biochemistry, a fascinating subject that deals with every function and every reaction of the body. Clinical biochemistry plays a tremendous impact on the diagnosis and treatment of patients. Medical students should be aware of the practicals, diagnostic parameters and their estimations. They should acquire sound knowledge about the diagnostic reports and its implications which aids in diagnosis and prognosis of the disease.

Biochemistry is the most fast growing subject, extensively applicable to understand the disease at molecular level. Estimations of various biochemical parameters definitely give an insight to understand the normal metabolism and its aberrations leading to diseases, which forms the foundation for medicine.

Biochemistry should be encouraged in relation to health and disease which will make the subject more interesting and fascinating to the students. We are hopeful that this practical biochemistry book will help the medical students to envisage about the various facts encountered in the reactions in the body.

Dear students let us admit that 'Biochemistry' is rarely a medical graduates' favorite given the fact that it is non-'clinical', extensive, volatile and there is little in it to arouse any amount of interest in the medical graduates. In our teaching biochemistry to undergraduate medical students we have realized practicals is where they have shown some amount of enthusiasm towards biochemistry.

Our main aim is to make this book simple and attractive to the undergraduate medical students as far as possible which is apparent from the title of the book. Towards achieving this goal, each practical session has been reorganized such that it becomes easy to understand. Wherever possible, the subject is presented in tabular format such that it becomes very concise; and all test results are given in color such that the simple task of reading the book itself realizes one doing the practicals. Fundamental concepts and principles behind each experiment are explained in a simple way.

Our only genuine concern is to help you to understand the subject in an easy and organized way such that this little knowledge comes as a big help not only in your exams but also in your future medical career.

We will be glad to accept constructive criticism and fruitful suggestion to make this book a better one.

Sowbhagya Lakshmi

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