

Illustrated Practical Microbiology

provides the undergraduate students a reliable, comprehensive, practical and informative approach to gaining high scores in the practical examinations.

- The book contains well displayed tables, detailed charts, summary text boxes and mnemonics to save students' time.
- Well labelled and captioned photographs serve as an effective tool to help retention by engaging the visual memory.
- The text is concise, easy to read and to the point.
- A separate section on frequently asked questions has been added to make understanding of the subject easy and interesting.
- Relevant addition has been made to highlight hospital infection control measures and biomedical waste management.

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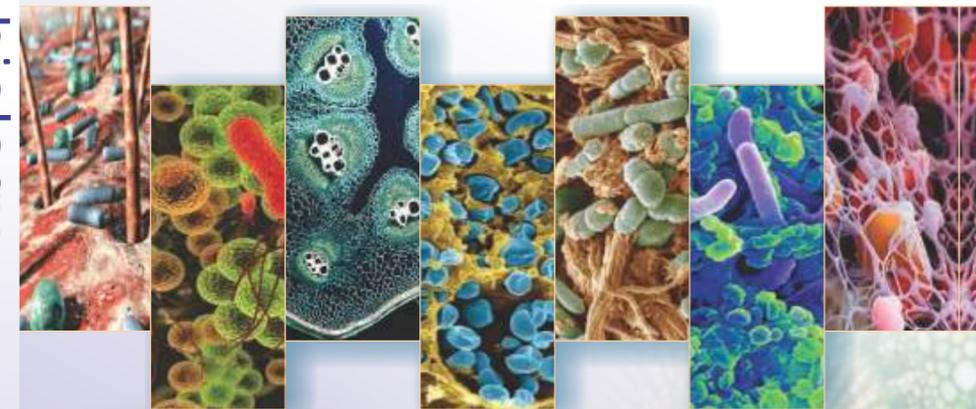
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Illustrated Practical Microbiology

Singh | Mukhopadhyay



Illustrated Practical Microbiology



Amandeep Singh
Shuvankar Mukhopadhyay



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The background of the cover features a light blue and white color scheme. On the left, there is a vertical teal bar. The top right corner shows a faint, circular pattern resembling a petri dish with a grid of lines, likely representing a microbiological culture. The title is centered in a dark blue serif font.

Illustrated Practical
Microbiology



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to

*our Teachers, Parents and Students
with Special Thanks to Dr Chhaya Chande*

"Never regard study as a duty, but as the enviable opportunity to learn."

Albert Einstein



Foreword

I take great pleasure in writing this foreword for *“Illustrated Practical Microbiology”*.

I know the authors from the last 4 years. Both are ambitious, highly motivated students and always eager to learn new things. I have observed in them a constant desire to learn more and strive for perfection. They have an experience in teaching microbiology to undergraduates and other paraclinical branches. Authors are also well versed with conducting undergraduate examinations for MBBS students.

The book includes many coloured photographs, microscopic slides, media and biochemical reactions, etc.

The book will be of definite benefit to students of MBBS, other paraclinical branches as well as postgraduates preparing for the university examinations.

I am delighted to encourage and assist them in pursuit of their goal. I wish the authors a grand success.



Abhay Chowdhary

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Preface

In our book titled *“Illustrated Practical Microbiology”*, the primary goal is to provide the undergraduate students with a reliable, comprehensive, practical and informative approach towards their practical examination. The authors describe the basic issues in practical microbiology, general principles for safety and diagnostic approaches including antimicrobial susceptibility testing and identification.

To facilitate understanding of the subject matter, we continue to employ the tables, detailed charts, summary text boxes and mnemonics. The labelled and captioned photographs have been selected to aid retention by engaging the visual memory in a manner complementary to mnemonics. The book is concise, easy to read, to the point text and a separate section on frequently asked questions has been added which has made the understanding of the subject easy and interesting. Also there is a relevant addition in the view of growing importance to hospital infection control measures and biomedical waste management.

This edition may replace the other books as a textbook of practical microbiology for MBBS, lab technology students and will also help the postgraduate students and thus may be recommended for the same. This edition integrates the theoretical principles and experimental techniques common to all the undergraduate courses.

We invite the students and faculty to share their thoughts and ideas to help us continually to improve through our blog and collaborative editorial platform. We will gladly make corrections if they are brought to our attention.

Amandeep Singh

Shuvankar Mukhopadhyay

Figures Courtesy

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Grant Govt. Medical College and JJ Group of Hospitals
Mumbai

Department of Microbiology
TN Medical College and BYL Nair Hospital
Mumbai

Gupta Polyclinic and Diagnostic Centre
Rourkela, Odisha

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We are very grateful to Dr SG Joshi (Professor, GGMC, Mumbai) and Dr Sarala Menon (Associate Professor, GGMC, Mumbai), without whose motivation and encouragement we would not have considered this book to be complete.

Dr Abhay Chowdhary (Professor and Head, Department of Microbiology, GGMC, Mumbai) is the one teacher who truly made a difference in our lives. It was under his tutelage that we developed a focus and became interested in writing this book. It was through his persistence, understanding and kindness that we completed this book. We doubt that we will ever be able to convey our appreciation fully, but we owe him our eternal gratitude.

Dr Jayanti Shastri (Professor and Head, Department of Microbiology, Nair Medical College, Mumbai) whose untiring efforts and drive to reach perfection have always been a source of inspiration. Her word of care and hand of support has been the pillar of strength while writing this book.

We would also like to thank our friends in the department for valuable, exchanges of knowledge while writing this book, which helped enrich the experience.

We would also like to thank our family with Special thanks to Dr Tapan Mukhopadhyay and Dr Ramala Mukhopadhyay, parents of second author and Mr Harvinder Singh and Ms Surinder Kaur, parents of first author for their support. Without their love, patience, understanding and encouragement we would not have been able to complete this book.

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Gupta Polyclinic and Diagnostic Centre, Rourkela, Odisha.

Last but not the least we would like to express our gratitude to CBS Publishers and their team for their substantial contributions associated with the completion of this book.

We hope this book serves to repay their contributions in some small part.

Amandeep Singh
Shuvankar Mukhopadhyay



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