

Basic Concepts of Microbiology and Principles of Sterilization, Microscopy, and Virology

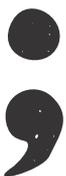
Eswari Beeram

● DeepScience
,

Basic Concepts of Microbiology and Principles of Sterilization, Microscopy, and Virology

Eswari Beeram

Assistant Professor, DBCS, School of Liberal Arts and
Sciences, Mohan Babu University, A. P., India



DeepScience

Published, marketed, and distributed by:

Deep Science Publishing
USA | UK | India | Turkey
Reg. No. MH-33-0523625
www.deepscienceresearch.com
editor@deepscienceresearch.com
WhatsApp: +91 7977171947

ISBN: 978-81-981367-5-6

E-ISBN: 978-81-981367-7-0

<https://doi.org/10.70593/978-81-981367-7-0>

Copyright © Eswari Beeram

Citation: Beeram E. (2024). *Basic Concepts of Microbiology and Principles of Sterilization, Microscopy, and Virology*. Deep Science Publishing. <https://doi.org/10.70593/978-81-981367-7-0>

This book is published online under a fully open access program and is licensed under the Creative Commons "Attribution-Non-commercial" (CC BY-NC) license. This open access license allows third parties to copy and redistribute the material in any medium or format, provided that proper attribution is given to the author(s) and the published source. The publishers, authors, and editors are not responsible for errors or omissions, or for any consequences arising from the application of the information presented in this book, and make no warranty, express or implied, regarding the content of this publication. Although the publisher, authors, and editors have made every effort to ensure that the content is not misleading or false, they do not represent or warrant that the information-particularly regarding verification by third parties-has been verified. The publisher is neutral with regard to jurisdictional claims in published maps and institutional affiliations. The authors and publishers have made every effort to contact all copyright holders of the material reproduced in this publication and apologize to anyone we may have been unable to reach. If any copyright material has not been acknowledged, please write to us so we can correct it in a future reprint.

Preface

Principles of microbiology covers around basic concepts of microbiology like history and supporting evidences of Biogenesis and germ theory. It explains about various scientific contributions made by the scientists and basic concepts of membrane transport systems. It also covers principles of light microscopy and electron microscopy and various staining techniques and their theories. It majorly targets the virus general characteristics and classification and physico chemical structure of viruses TMV, Herpes virus, Polyoma and T4 bacteriophage.

Eswari Beeram

Contents

1	History of microbiology.....	1-7
	Eswari Beeram	
2	Classification of microbes based on biochemical requirements.....	8-10
	Eswari Beeram	
3	Sterilisation.....	11-19
	Eswari Beeram	
4	Microscopy.....	20-26
	Eswari Beeram	
5	Staining techniques.....	27-31
	Eswari Beeram	
6	Cellular structures of bacteria.....	32-41
	Eswari Beeram	
7	Virology.....	42-58
	Eswari Beeram	