

**Laboratory
Manual of Microbiology**

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PREFACE

The rapid expansion of microbiology has led to proliferation of technical methods. This laboratory manual of microbiology is an attempt to form a comprehensive reference source for a common microbiologist. The manual is aimed at the graduate and advanced student and the research worker who studies or uses microorganisms. Each exercise has been designed to be modular and with brevity. The exercises have also been designed to use commonly available microbiological tools and instruments to complete in short time period.

This laboratory manual of microbiology has been written to meet the needs of students taking microbiology as major or subsidiary subject. The intention is to provide the student with an organized, user-friendly tool to better enable him or her to understand laboratory aspects of microbiology as well as to hopefully make learning laboratory material and preparing for independent player of a given experiment. Each exercise provides step-by-step procedure to complete the assignment successfully and easily. The lab exercises are designed to give the student "hands-on" laboratory experience to better reinforce certain topics discussed in exercise. A glossary is included that covers terms that may be new with this course as well as basic, discipline-specific terminology from microbiology and soil science that may be new to some students.

I hope you enjoy this laboratory manual and also hope it makes your study of microbiology a bit easier. Keep in mind that the labs are meant to be informal and your instructor is more than willing to answer any questions on either lab or exercise topics.

Vivek Kumar

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