



Book Review

Textbook of microbiology: An integrated and clinical case based approach, 1st ed., V. S. Randhawa (Peepee Publishers and Distributors (P) Ltd., Delhi) 2019. 650 pages. Price: Not mentioned.

ISBN 978-81-8445-249-5

This is a unique book of microbiology, which deals with the subject in a question-answer format. It is divided into 17 sections, each dealing with a different aspect of microbiology. Each section ends with some questions, which have been answered in detail in the text. Tables, text boxes, figures and photographs are used to simplify the subject. The quality of the photographs could have been better. Some cartoons made by students, have also found place in the book. The subject has been dealt with in a clinical case-based format and is the first attempt of its kind by Indian authors. From today's perspective where medical curriculum is designed in a competency-based manner, students may find it useful.

Section I deals with general microbiology; there are questions framed on the historical perspective of microbiology, staining techniques used in microbiology laboratory, bacterial morphology and physiology, culture media, culture techniques, identification of bacteria, practical aspects of microbiology, epidemiology of infectious diseases, chemotherapy of bacterial diseases and bacterial pathogenesis. All these questions are answered in detail.

Section II deals with basic immunology and briefly covers all aspects of the same including innate and acquired immunity, molecules of immunological response, antigen- antibody reactions, hypersensitivity reactions and diseases of the immune system.

Sections III to X discuss systemic bacteriology. Section III elaborates on Gram-positive cocci, IV

deals with Gram-negative cocci, V deals with Gram-positive rods, VI deals with Gram-negative rods, VII deals with non-fastidious Gram-negative rods, VIII deals with Gram-negative curved rods, IX deals with fastidious Gram-negative rods and X deals with atypical intracellular bacteria.

The authors have tried to blend bacterial morphology and clinical syndromes caused by different bacteria. Important aetiologies, pathogenesis, diagnosis and treatment aspects of syndromes caused by various groups of organisms have also been described. At times, classification may appear confusing to an undergraduate student, but, overall, the effort is worth appreciation.

Sections XI to XIV deal with the syndromic approach of viral diseases. The sections are divided into general virology, DNA viruses, RNA viruses and miscellaneous viral syndromes. As this book employs a case-based approach and virology is better discussed in clinical syndromes (such as upper respiratory tract illness/lower respiratory tract illness) with overlapping causes, it may be difficult to avoid repetition. Section XV briefly deals with medical mycology and discusses each type of fungus (based on morphology) with the respective syndrome caused by it.

Section XVI deals with specimen collection and transport pertaining to various clinical syndromes and processing of these samples. This is an important area for all clinical doctors, which is often neglected in the curriculum. Samples such as cerebrospinal fluid, blood, serum and swabs are dealt with.

Section XVII deals with applied microbiology and discusses normal human microbial flora, healthcare-associated infections, microbiology of food and water, biomedical waste management, antimicrobial

susceptibility testing, emerging and re-emerging infections, zoonosis, *etc.*

Though the book does not cover parasitology at all and so may not qualify as a textbook of microbiology, it can serve as an adjunct guide to undergraduate medical students studying microbiology and infectious diseases.

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Received August 5, 2019