

Clinical Applications Based Questions in **Physiology**

presents case based questions on most of the topics in physiology, arranged in a system-wise manner, following the CBME Guidelines | Competency Based Undergraduate Curriculum for the Indian Medical Graduate.

Questions are arranged sequentially so as they build upon each other. The difficulty of questions varies from the simple to progressing into the applied, problem-solving ones. This order will kindle the thought processes of students and enhance their ability to apply knowledge of physiology concepts to clinical medicine.

By solving the case-based questions, they will be equipped with the skills of self-directed learning and this integration of basic and clinical sciences will help them understand clearly the big picture of disease process.

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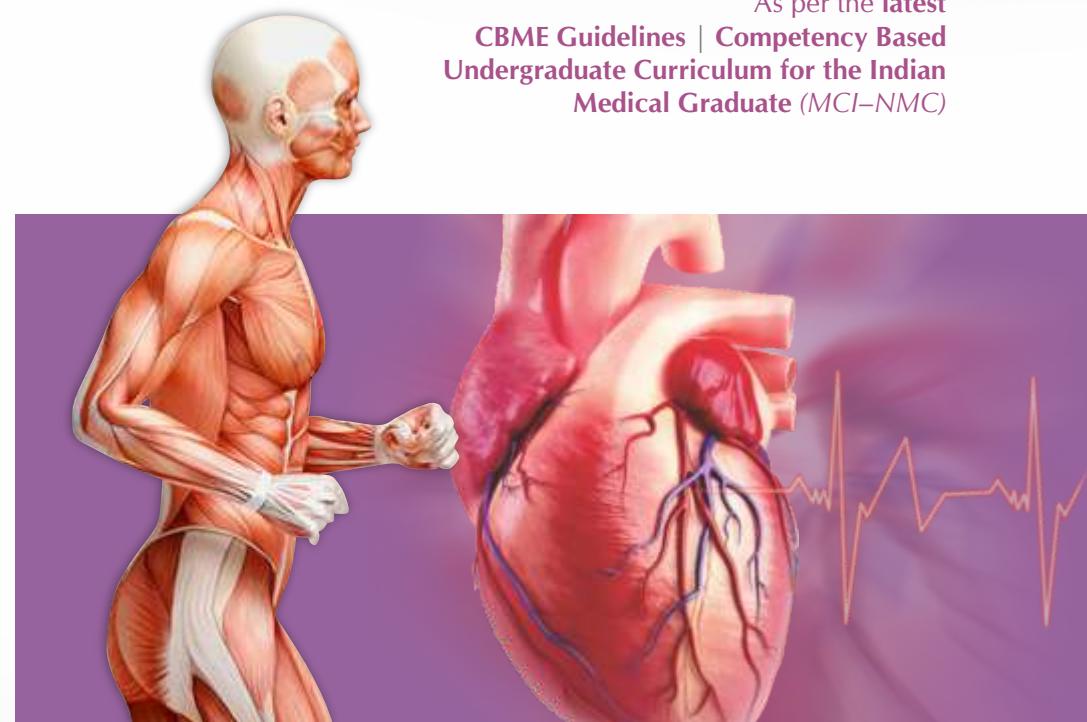


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**Pranali Vinayak Shimpi
Lalita Madan Chandan**



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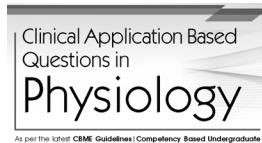
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As per the latest CBME Guidelines | Competency Based Undergraduate Curriculum for the Indian Medical Graduate (MCI-NMC)

ISBN: 978-93-90709-21-2

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First Edition: 2021

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Published by Satish Kumar Jain and produced by Varun Jain for

CBS Publishers & Distributors Pvt Ltd

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Printed at India Binding House, Noida, UP, India

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Science and technology are constantly changing fields. New research and experience broaden the scope of information and knowledge. The authors have tried their best in giving information available to them while preparing the material for this book. Although, all efforts have been made to ensure optimum accuracy of the material, yet it is quite possible some errors might have been left uncorrected. The publisher, printer and the authors will not be held responsible for any inadvertent errors, omissions or inaccuracies.

Foreword

It gives me an immense pleasure in writing the Foreword for this book. Physiology is one of the basic medical sciences in which basic normal body functions are thoroughly studied. This is the base on which understanding of further subjects particularly medicine is dependent. Purpose of teaching physiology is not only to learn body functions but more important is to apply these concepts in clinical scenario, so that proper analysis of signs and symptoms can be done ultimately leading to better and specific approach to diagnosis and management of a patient.

In competency-based medical education, the emphasis is given on proper application of knowledge. At First MBBS level, the concept of early clinical exposure has been recently introduced. Problem-based learning is always a challenging and interesting task. It is my belief that this book in present form should meet the requirements of the students fully. Authors have taken commendable efforts to create problem-based scenarios which in actual practice is difficult to do. I appreciate the thoroughness and innovative approach of authors in making this book useful to the students.

The strength of the book is that it has covered the must know areas of the syllabus. I acknowledge the efforts, dedication, energy of Dr Pranali V Shimpi and Dr Lalita M Chandan for their achievement. I look forward for enhancement of book by introducing new topics in future.

Best wishes in your future endeavours and hope to see more of your work in future. I wish this book all success.

Dr Arun N Kowale

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Ex-Vice-Dean (UG)
BJ Medical College and Sassoon Hospital, Pune

Preface

Medical Council of India has revised undergraduate medical curriculum as 'competency based' in order to serve the purpose of creating competent 'Indian Medical Graduate'. Implementation of which has been started from 2019–20 medical batch. In this revised curriculum, great efforts have been put forth to encourage integrated teaching in traditional subjects using 'clinical context-based learning approach'. This approach has explored the relevance of preclinical subjects in understanding medicine.

Physiology being the basis of medicine, thus provides us an insight to any disease or clinical condition. As per new curriculum, the clinical approach of 1st year medical professionals towards applications of physiology has to be enhanced. So 'clinical application-based questions' have also been incorporated in theory as well as practical examinations. This book has been written with the intention of providing sample questions in physiology in same regard. We have tried to cover clinical applications of maximum number of competencies lead by MCI.

The process of book writing was supposed to be completed quiet earlier. But because of COVID-19 pandemic, it got a bit delayed. In current edition, we have focused on writing questions only. In subsequent editions, we may focus on answers to these questions.

This book will definitely help 1st year medical professionals to improve their vision towards clinical applications of physiology; thus making, reading of physiology more interesting and relevant for them. Students themselves will try to apply the physiological concepts towards disease process which will enhance self-learning as well. It would also be helpful for higher professional and postgraduate

students. It will help medical teachers for planning classes as well as preparing examination papers.

The feedback from readers would be vital for future development of this book. We are indebted to our publishers for their valuable suggestions and publishing this book on faster track.

Pranali V Shimpi

Lalita M Chandan

Contents

<i>Foreword by Dr Arun N Kowale</i>	v
Preface	vii
1. Approach to Learning Physiology	1
2. General Physiology	6
3. Haematology	13
4. Nerve and Muscle Physiology	26
5. Cardiovascular Physiology	31
6. Respiratory Physiology	43
7. Gastrointestinal Physiology	56
8. Endocrinology	65
9. Reproductive Physiology	74
10. Renal Physiology	83
11. Neurophysiology	91
12. Integrated Physiology	109