

# OSCE and OSPE in Physiology

A Competency Assessment Tool

presents an exhaustive collection of objective structured clinical | practical examination (OSCE | OSPE) stations in physiology for learning and assessment.

This unique collection of performance, response and question stations in physiology can serve as a useful formative and summative assessment tool for assessment of knowledge, psychomotor, communication and attitudinal domains of learning in physiology and its clinical applications by catering to the 'show's how' level of Miller's pyramid.

The book follows various competencies envisaged in Competency Based Medical Education (CBME) and as prescribed in Competency Based Undergraduate Curriculum for the Indian Medical Graduate. It will serve as a ready-reference/guide for learning essential psychomotor skills by medical students as well as the teachers.

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Waghmare Rawekar Jagzape Waghmare



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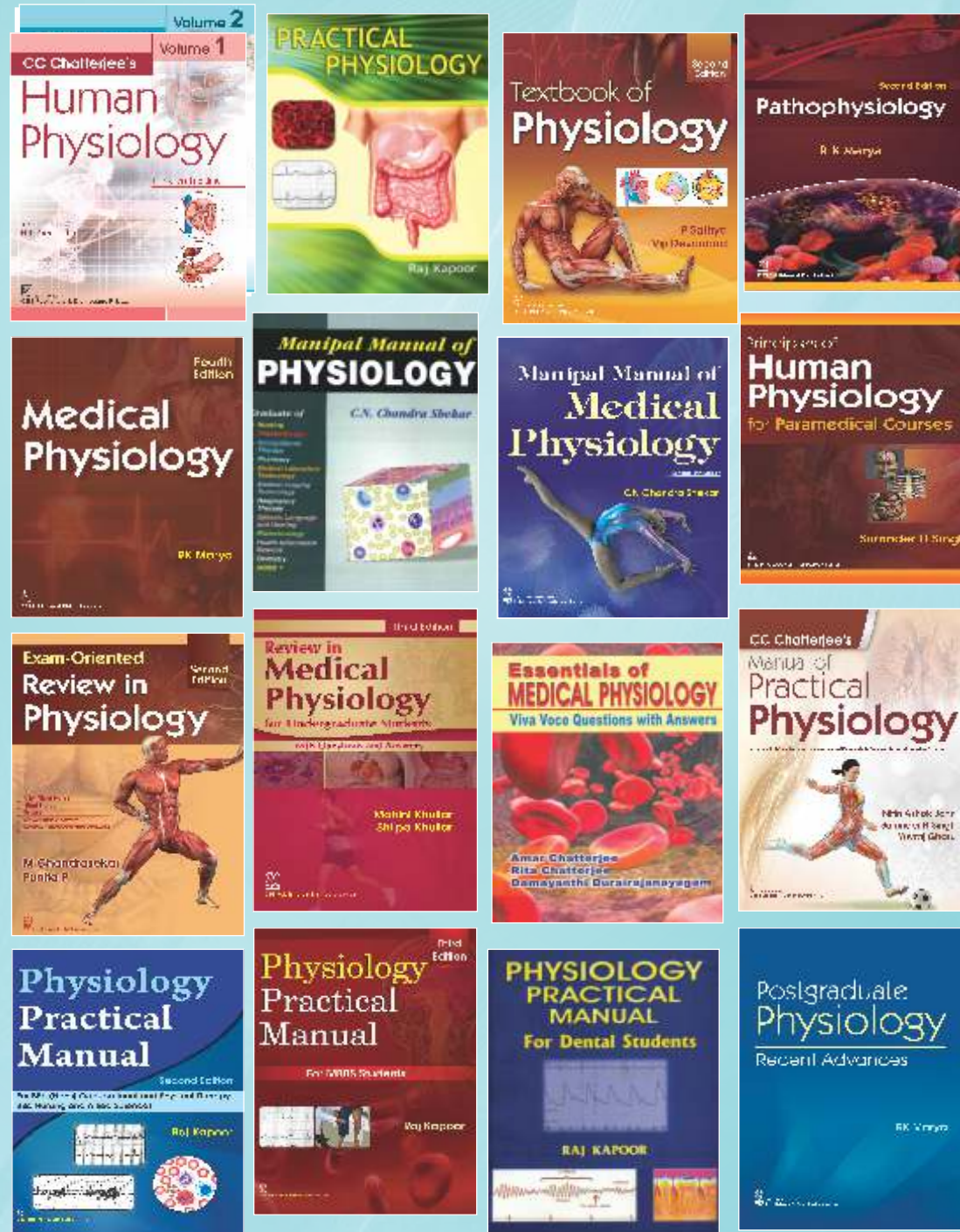


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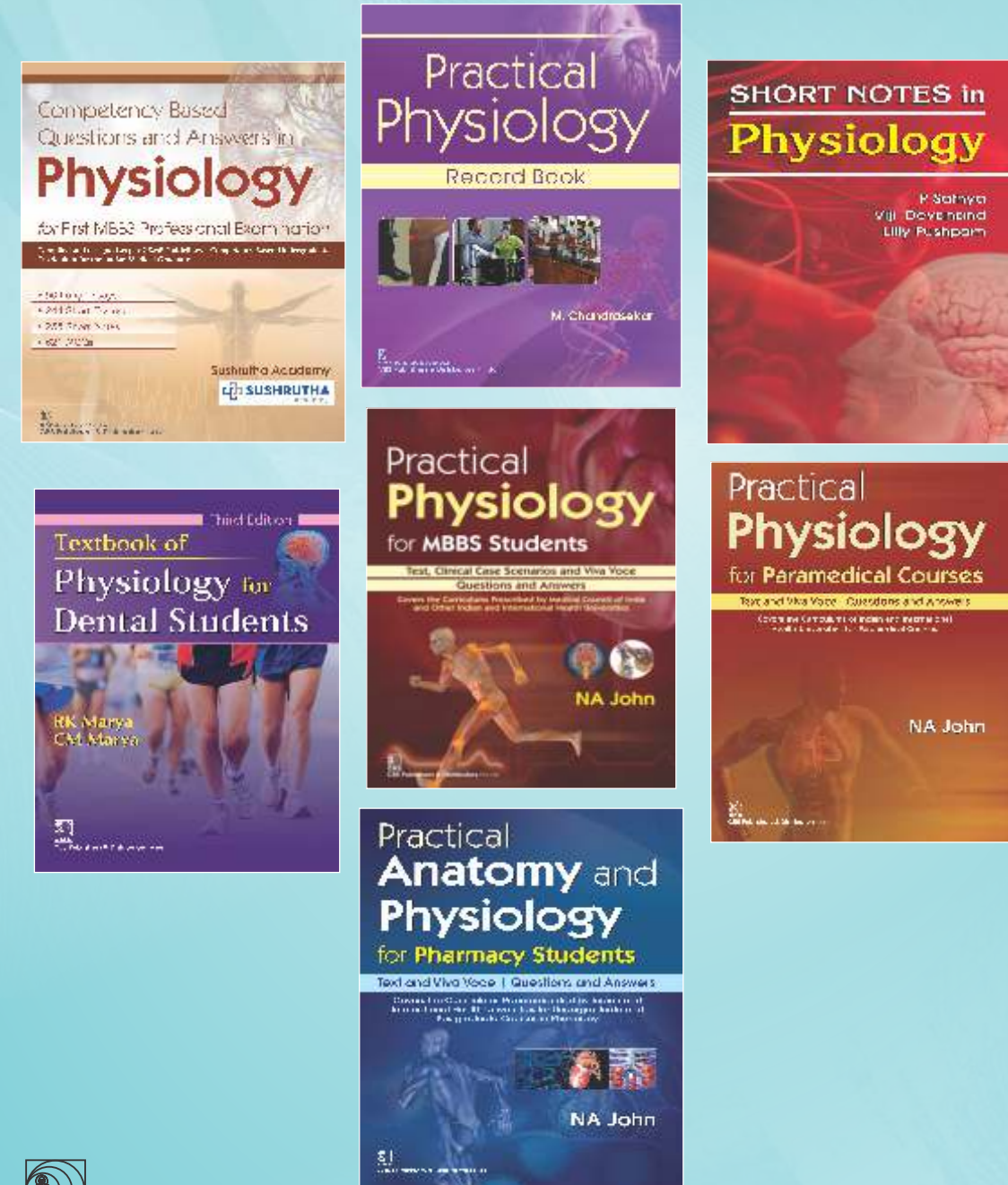


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# Foreword

Health has always been perceived as the fundamental right attributable to every global citizen. The genuine actualization of this contemplated goal mandates effective and meaningful generation of trained health manpower in required numbers with efficacy and capacity.

Healthcare delivery system and its efficiency is totally dependent on the efficacy of the trained health manpower generated by the various medical schools in any country. It is for this very reason it is imperative that standards of medical education must be so set out that they are capable of mitigating these vital challenges, concerns and need in the most desired manner in the larger interest of men, mankind and humanity as a whole.

It is on this advent that Competency Based Undergraduate Medical Education was envisioned and the same has been put into vogue in order to make medical education a bonafide instrumentality of actualizing the mandated 'Welfare State' embedded in the Constitution of India for the fulfillment of legitimate expectations of all its citizens.

One of the important aspects of this paradigm shift contemplated through Competency Based Medical Education Curriculum is structuring of the core competencies, their blending with ancillary ones and making them progress in the context of ascendancy thereto and their appropriate certification in an objective and credible manner. This mandates an integrated approach for the fulfillment of so set out objectives in their entirety.

It is in this backdrop the significance of the book titled *OSCE and OSPE in Physiology: A Competency Assessment Tool* authored by Dr. Tripti Srivastava, Professor of Physiology and Convener of the Nodal Centre recognized by the Medical Council of India; Dr. Alka Rawekar, Professor of Physiology and Co-Convener of the MCI Nodal Centre; Dr. Arunita Jagzape, Assistant Professor, Physiology at All India Institute of Medical Sciences, Raipur; and Dr. Lalit Waghmare, Professor, Physiology and Pro-Vice-Chancellor, DMIMS; turns out to be a pioneer work of its type aimed at fulfilling the acutely felt and perceived necessities.

The inclusions in the book have been diligently planned and appropriately structured. They have been evolved to give an operational shape to the modality of Objectively Structured Clinical Examination (OSCE) in order to give real meaning and essence to the hitherto operational phrase that the entire medicine and its allied specialities are based on the core edifice of physiology and biochemistry. The diligence with which this core edifice is strengthened is directly proportional to the efficacy of the suprastructure placed thereon.

The creative manifestation so diligently brought out by the authors is not only timely and relevant, but is also bound to act as a ready reckoner to all the concerned in order to make the teaching and learning of physiology purposive, meaningful, cogent, credible, consistent and relevant to the targeted purpose and ending up in being impactful.

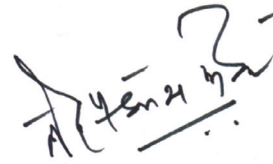
This kaleidoscope of objectives to my understanding would get fulfilled and actualized by this notable creative creation by the authors in the form of this book,



which has the peculiarity of appropriate syntaxing and having a free-flowing character proving to be of handy use to all the end users and thereby establishing its own sense of utility.

The authors deserve all compliments and appreciation for their notable initiative, which is the saga of the trinity of their unparalleled devotion, emulative dedication and unending commitment.

I am sure the testimony by the users would be a real pragmatic recognition to this glorious creativity. I record my humble gratitude to the authors for their laudable and notable effort, which to my perception is bound to fill in the huge void, which is in vogue, but would stands filled up by this notable initiative and manifestation thereto.



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# Preface

*Greetings to all our revered readers.*

This book, *OSCE and OSPE in Physiology: A Competency Assessment Tool*, is a reflection of our ardent urge to provide a path to the concepts and execution of OSCE at the end user level. This book will cater to medical, dental students as beneficiaries and not just limited to them, it can extend to other health professionals dealing with the patients. The book shall help the students to prepare for the assessment of competencies and provide learning opportunity as well.

Dear venerated readers, this book is not a closed system but an open sea of dynamic explorations wherein you as a reader can ratify to run your imaginations and modifications and carry the concepts beyond this book instead of ending your quest of experimentation with a deadlock.

We have tried to include the details of OSCE procedural stations and response stations spanning respiratory system, cardiovascular system, abdomen and central nervous system. We have also included some of the OSPE procedural stations for hematology practicals, clinical photographs, and problem-solving questions.

The marks allotted to the items in checklist are as per our best knowledge and understanding (which can be modified as per your ideation). We have provided with the correction factor for every station. This can be explained with the following example:

Total marks allotted to all OSCE stations are 40 and hence for every station, it will be 4, if the number of stations are 10. Total number of stations are 12 that includes 5 procedural station, 5 response stations (total 10) and 2 rest stations and total marks allotted for procedural stations are 15, 16, 23, 10, 15 respectively and for response stations are 4 each.

But the marks allotted for each station are unique and different. Therefore, we calculate the correction factor for every station. If the marks allotted to one station is 15 and we have to reduce it to 4, then the correction factor will be  $4/15 = 0.26$ . For 16 marks station, it will be  $4/16 = 0.25$ ; for 23,  $4/23 = 0.17$  and so on.

We have included 5 scale format of Global Rating as well; "1. Poor; 2. Unsatisfactory; 3. Satisfactory; 4. Good; 5. Excellent". The Global Rating can also be executed using 3 scales.

In this way, we can customized the marks for every station for each student.

We wish all our readers a pleasant reading through this book and we welcome feedback from our readers regarding this book.

**Tripti Srivastava Waghmare**  
**Alka Rawekar**  
**Arunita Jagzape**  
**Lalitbhushan Waghmare**



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