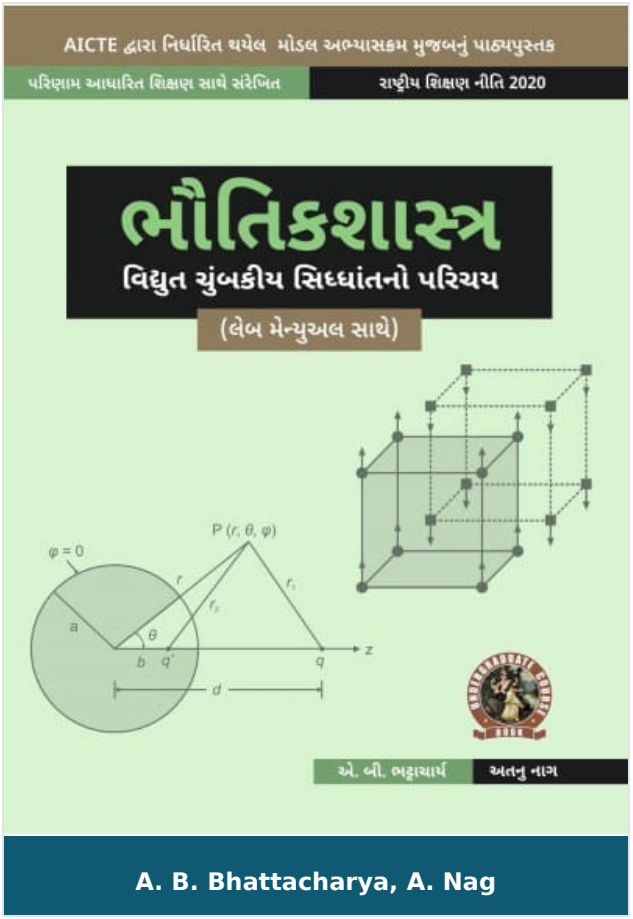

A. B. Bhattacharya, A. Nag

Physics (Introduction to Electromagnetic Theory) (with Lab Manual)

Author :	A. B. Bhattacharya, A. Nag
ISBN 13 :	978-93-55381-61-3
ISBN 10 :	9355381611
E-ISBN 13 :	978-93-55381-61-3
Edition :	First
Pages :	328
Type of book :	Physical
Year :	2023
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 395.00
Categories :	Gujarati Books, Ebooks, Book Store, AICTE Prescribed Textbooks
Condition Type :	New
Country Origin :	India

Product Description

Engineering Physics: Introduction to Electromagnetic Theory has been written for the first year students of B. Tech Engineering Degree Courses of all Indian Universities following the guideline and syllabus as recommended by AICTE. The book, written in a very simple and lucid way, will be very much helpful to reinforce understanding of different aspects to meet the engineering student’s needs Writing a text-cum manual of this category poses several challenges providing enough content without sacrificing the essentials, highlighting the key features, presenting in a novel format and building informative assessment. This book on engineering physics will prepare students to apply the knowledge of Electromagnetic Theory to tackle 21st century and onward engineering challenges and address the related questions.

Some Salient Features of the Book:

1. Expose basic science to the engineering students to the fundamentals of physics and to enable them to get an insight of the subject.

2. To develop knowledge on critical questions, solved and supplementary problems covering all types of medium and advanced level problems in a very logical and systematic manner.

3. Some essential information for the users under the heading “know More” for clarifying some basic

4. Information as well as comprehensive synopsis of formulae for a quick revision of the basic principles.

5. Constructive manner of presentation so that an Engineering degree students can prepare to work in different sector or in national laboratories at the very forefront of technology.

Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Table Of Contents

- Foreword
- Acknowledgement
- Preface
- Outcome Based Education
- Course Outcomes
- Abbreviations and Symbols
- List of Figures
- Guidelines for Teacher
- Guidelines for Students
- Electrostatics in Vacuum
- Electrostatics in Linear Dielectric Medium
- Magnetostatics
- Magnetostatics in Linear Dielectric Medium
- Faraday’s Law
- Maxwell’s Equations
- Electromagnetic Waves
- Table of Physical Constants
- Appendices
- Annexures
- References for Further learning
- CO and PO attainment Table
- Index

Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Author

A. B. Bhattacharya

Prof. A. B. Bhattacharya did his MSc and PhD degree from the University of Calcutta in Physics and Post-doc from the Massachusetts Institute of Technology (MIT), Cambridge, USA. He worked in close collaboration with the leading laboratories like Lincoln Laboratory; Milestone Hill Observatory; Earth, Atmospheric and Planetary Sciences division of MIT and many other well recognized laboratories in India and abroad. He served as Professor & Head of the Department of Physics, University of Kalyani; Dean of Research and Head of the ECE Department, Techno India University; Pro Vice Chancellor of JIS University and Director of Brainware University. He has published 32 text books for Science and Engineering students, two popular books for general readers and over 400 research articles in reputed International Journals. Under his supervision 24 scholars received their doctoral degree. He is a fellow of the Institute of Electronics and Telecommunication Engineers and member of many scientific organizations. India International Friendship Society awarded him the prestigious "Shiksha Ratna Award" and Certificate of Excellence for meritorious services, outstanding performance and significant contribution to education. The International Institute of Success Awareness hon0red him with their globally recognized "Glory of India Gold Medal" for his outstanding contribution to the national stature of India. A few words from the certificate issued by Prof. Williams of MIT may be quoted "Our collaborative effort was directed at the wavelength dependence of radar echoes observations with the Millstone Hill UHF radar in Westford. He made use of the Charles River Data System computer in the Weather Radar Laboratory for these calculations. His results help to make a convincing case that the volume reflectivity associated with lighting is a diminishing function of radar wavelength, contrary to contemporary thinking". Dr.

A. Nag

Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

A. Nag Dr. Atanu Nag did his M. Sc. in 2007 and Ph. D. in 2013 from the University of Kalyani. He has published over 50 Journal papers and 5 books for Science & Engineering students. Presently he is the Head and Associate Professor in the Department of Physics, Modern Institute of Engineering & Technology, Hooghly, West Bengal.

Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002

Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320