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PHYSICS

for IIT-JEE 2012-13

With Fully
Solved
Exercises

ELECTRICITY AND MAGNETISM

B.M. Sharma



Physics for IIT-JEE

ELECTRICITY & MAGNETISM

B.M. Sharma

CENGAGE
Learning

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For

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Preface

Since the time the IIT-JEE (Indian Institute of Technology Joint Entrance Examination) started, the examination scheme and the methodology have witnessed many a change. From the lengthy subjective problems of 1950s to the matching column type questions of the present day, the paper-setting pattern and the approach have changed. A variety of questions have been framed to test an aspirant's calibre, aptitude, and attitude for engineering field and profession. Across all these years, however, there is one thing that has not changed about the IIT-JEE, i.e., its objective of testing an aspirant's grasp and understanding of the concepts of the subjects of study and their applicability at the grass-root level.

No subject can be mastered overnight; nor can a subject be mastered just by formulae-based practice. Mastering a subject is an expedition that starts with the basics, goes through the illustrations that go on the lines of a concept, leads finally to the application domain (which aims at using the learnt concept(s) in problem-solving with accuracy) in a highly structured manner.

This series of books is an attempt at coming face-to-face with the latest IIT-JEE pattern in its own format, which is going to be highly advantageous to an aspirant for securing a good rank. A thorough knowledge of the contemporary pattern of the IIT-JEE is a must. This series of books features all types of problems asked in the examination—be it MCQs (one or more than one correct), assertion-reason type, matching column type, or paragraph-based, thought-type questions. Not discounting to need for skilled and guided practice, the material in the book has been enriched with a large number of fully solved concept-application exercises so that every step in learning is ensured for the understanding and application of the subject.

This whole series of books adopts a multi-faceted approach to mastering concepts by including a variety of exercises asked in the examination. A mix of questions helps stimulate and strengthen multi-dimensional problem-solving skills in an aspirant. Each book in the series has a sizeable portion devoted to questions and problems from previous years' IIT-JEE papers, which will help students get a feel and pattern of the questions asked in the examination. The best part about this series of books is that almost all the exercises and problem have been provided with not just answers but also solutions.

Overall the whole content of the book is an amalgamation of the theme of physics with ahead-of-time problems, which an aspirant must follow to accomplish success in IIT-JEE.

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