

എ.ബി. ഭട്ടാചാര്യ | അതാനു നാഗ്

Physics - Introduction to Mechanics (with Lab Manual)

Author: A. B. Bhattacharya

ISBN 13: 978-93-55381-46-0

ISBN 10: 93-55381-46-8

E-ISBN 13: 978-93-55381-46-0

Edition: 1

Pages: 264

Type of book : Paperback

Year: 2025

Language: Malayalam

Publisher: Khanna Publishing House

Categories:AICTE Prescribed Textbooks,

Ebooks, Malayalam

Condition Type: New



Product Description

Physics: Introduction to Mechanics 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 Mechanics to tackle 21 century and onward engineering challenges and address the related questions. Some Salient features of the book: Expose basic science to the engineering students to the fundamentals of physics and to enable them to get an insight of the subject. To develop knowledge on critical questions solved and supplementary problems covering all type of medium and advanced level. Under problems in a very logical and systematic manner. Some essential information for the user the heading "Know more" for clarifying some basic information as well as comprehensive synopsis of formulae for a quick revision of the basic principles. Constructive manner of presentation so that an Engineering degree students can prepare to work in different sectors or in national laboratories at the very forefront of technology.



About Contents

Foreword

Acknowledgement

Preface

Outcome Based Education

Course Outcomes

Abbreviations and Symbols

List of Figures

Guidelines for Teachers

Guidelines for Students

Unit 1: Introductory Mechanics.

Unit 2: Conservation Principles.

Unit 3: Dynamics of Particles.

Unit 4: Oscillations.

Unit 5: Rotational Motion.

Unit 6: Dynamics of a Right Body.

Table of Physical Constants

Appendices

Annexures

References for Further learning

CO and PO Attainment Table

Ind

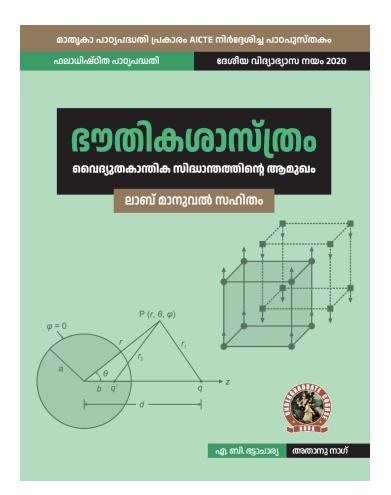


Author

Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers.

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.





Physics - Introduction to Electromagnetic Theory (with Lab Manual)

Author: A. B. Bhattacharya

ISBN 13: 978-93-55381-55-2

ISBN 10: 93-55381-55-7

E-ISBN 13: 978-93-55381-55-2

Edition: 1

Pages: 384

Type of book : Paperback

Year: 2025

Language: Malayalam

Publisher: Khanna Publishing House

Categories:AICTE Prescribed Textbooks,

Ebooks, Malayalam

Condition Type: New



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: Expose basic science to the engineering students to the fundamentals of physics and to enable them to get an insight of the subject. 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. Some essential information for the users under the heading "know More" for clarifying some basic Information as well as comprehensive synopsis of formulae for a quick revision of the basic principles. 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.



About Contents

| | | rd |
|--|--|----|
| | | |
| | | |

Acknowledgement

Preface

Outcome Based Education

Course Outcomes

Abbreviations and Symbols

List of Figures

Guidelines for Teacher

Guidelines for Students

Unit 1: Electrostatics in Vacuum.

Unit 2: Electrostatics in Linear Dielectric Medium.

Unit 3: Magnetostatics.

Unit 4: Magnetostatics in Linear Dielectric Medium.

Unit 5: Faraday's Law.

Unit 6: Maxwell's Equations.

Unit 7: Electromagnetic Waves.

Table of Physical Constants

Appendices

Annexures

References for Further learning

CO and PO attainment Table

Index



Author

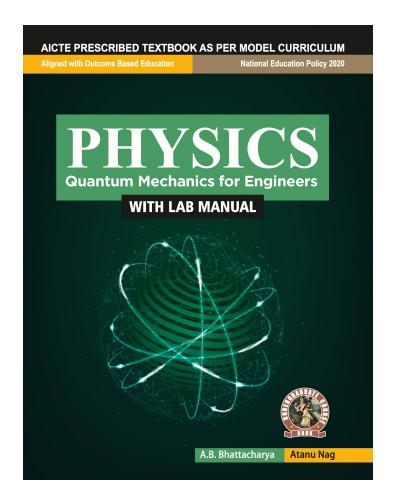
A. B. Bhattacharya

Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers.

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.





Physics (Quantum Mechanics for Engineers) With Lab Manual

Author: A. B. Bhattacharya

ISBN 13: 978-93-91505-25-7

ISBN 10: 93-91505-25-2

E-ISBN 13: 978-93-91505-25-7

Edition: 1

Pages: 240

Year: 2025

Language : English

Publisher: Khanna Publishing House

Categories:AICTE Prescribed Textbooks,

Ebooks, English Books

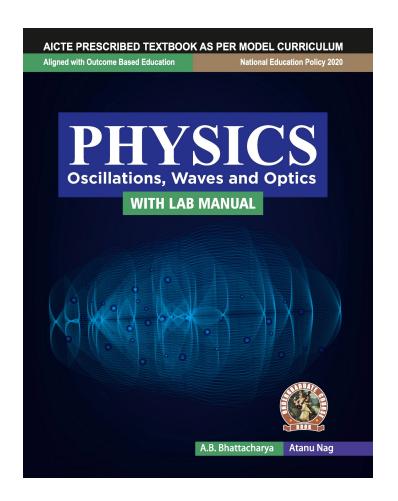
Condition Type: New

Country Origin: India

Product Description

Physics (Quantum mechanics for Engineers) With Lab Manual





Physics (Oscillations, Waves and Optics) With Lab Manual

Author: A. B. Bhattacharya

ISBN 13: 978-93-91505-13-4

ISBN 10: 93-91505-13-9

E-ISBN 13: 978-93-91505-13-4

Edition: 1

Pages: 272

Type of book : Paperback

Year: 2025

Language : English

Publisher: Khanna Publishing House

Categories:AICTE Prescribed Textbooks,

Ebooks, English Books

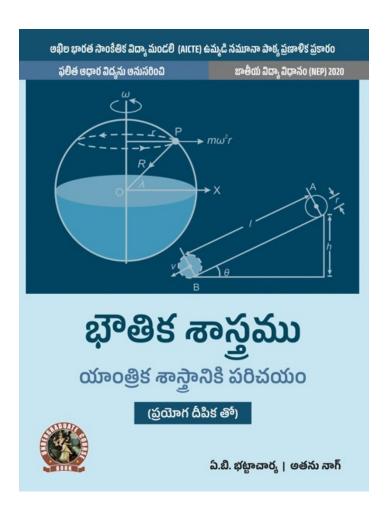
Condition Type: New

Country Origin: India

Product Description

Physics (Oscillations, Waves and Optics) With Lab Manual





Physics (Introduction to Mechanics) with Lab Manual

Author: A. B. Bhattacharya

ISBN 13: 978-93-91505-96-7

ISBN 10: 93-91505-96-1

E-ISBN 13: 978-93-91505-96-7

Edition: 1

Pages: 256

Type of book : Paperback

Weight (g): 330.00

Year: 2025

Language : Telugu

Publisher: Khanna Publishing House

Categories:AICTE Prescribed Textbooks,

Ebooks, Telugu Books

Condition Type: New



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.



Table of Contents

| Foreword | Fo | re | w | O | rd |
|----------|----|----|---|---|----|
|----------|----|----|---|---|----|

Acknowledgement

Preface

Outcome Based Education

Course Outcomes

Abbreviations and Symbols

List of Figures

Guidelines for Teacher

Guidelines for Students

Unit 1: Electrostatics in Vacuum.

Unit 2: Electrostatics in Linear Dielectric Medium.

Unit 3: Magnetostatics.

Unit 4: Magnetostatics in Linear Dielectric Medium.

Unit 5: Faraday's Law.

Unit 6: Maxwell's Equations.

Unit 7: Electromagnetic Waves.

Table of Physical Constants

Appendices

Annexures

References for Further learning

CO and PO attainment Table

Index



Authors

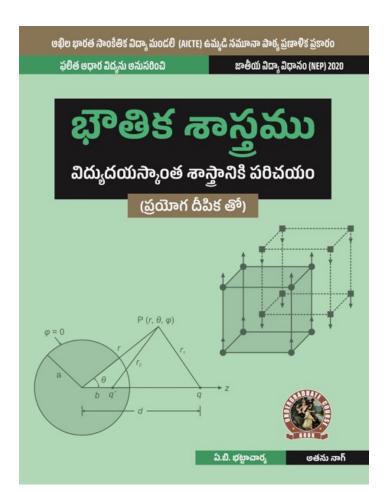
A. B. Bhattacharya

Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers.

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.





Physics (Introduction to Electromagnetic Theory) with Lab Manual

Author: A. B. Bhattacharya

ISBN 13: 978-93-91505-88-2

ISBN 10: 93-91505-88-0

E-ISBN 13: 978-93-91505-88-2

Edition: 1

Pages: 384

Type of book : Paperback

Weight (g): 500.00

Year: 2025

Language: Telugu

Publisher: Khanna Publishing House

Categories:

AICTE Prescribed Textbooks,

Ebooks, Telugu Books

Condition Type: New



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.

Table of Contents

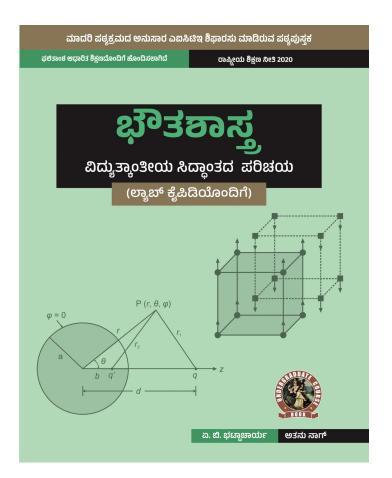
Foreword Acknowledgement Preface Outcome Based Education Course Outcomes Abbreviations and Symbols List of Figures Guidelines for Teacher Guidelines for Students Unit 1: Electrostatics in Vacuum. Unit 2: Electrostatics in Linear Dielectric Medium. Unit 3: Magnetostatics. Unit 4: Magnetostatics in Linear Dielectric Medium. Unit 5: Faraday's Law. Unit 6: Maxwell's Equations. Unit 7: Electromagnetic Waves. Table of Physical Constants Appendices Annexures References for Further learning CO and PO attainment Table Index



Authors

Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers. 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.





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

Author: A. B. Bhattacharya

ISBN 13: 978-93-91505-86-8

ISBN 10: 93-91505-86-4

E-ISBN 13: 978-93-91505-86-8

Edition: 1

Pages: 320

Type of book : Paperback

Weight (g): 430.00

Year: 2024

Language: Kannada

Publisher: Khanna Publishing House

Categories:

AICTE Prescribed Textbooks,

Ebooks, Kannada Books

SKU: 1725635397

Condition Type: New



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.

Table of Contents

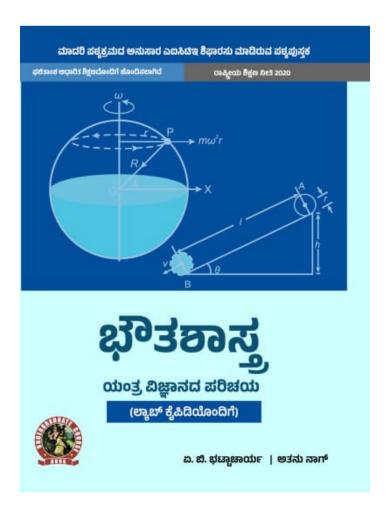
Foreword Acknowledgement Preface Outcome Based Education Course Outcomes Abbreviations and Symbols List of Figures Guidelines for Teacher Guidelines for Students Unit 1: Electrostatics in Vacuum. Unit 2: Electrostatics in Linear Dielectric Medium. Unit 3: Magnetostatics. Unit 4: Magnetostatics in Linear Dielectric Medium. Unit 5: Faraday's Law. Unit 6: Maxwell's Equations. Unit 7: Electromagnetic Waves. Table of Physical Constants Appendices Annexures References for Further learning CO and PO attainment Table Index



Authors

Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers. 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.





Physics (Introduction to Mechanics)

Author: A. B. Bhattacharya

ISBN 13: 978-93-91505-94-3

ISBN 10: 93-91505-94-5

E-ISBN 13: 978-93-91505-94-3

Edition: 1

Pages: 272

Type of book : Paperback

Weight (g): 330.00

Year: 2023

Language: Kannada

Publisher: Khanna Publishing House

Categories:AICTE Prescribed Textbooks,

Ebooks, Kannada Books

SKU: 1725666077

Condition Type: New



Product Description

Physics: Introduction to Mechanics 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 Mechanics to tackle 21 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 type of medium and advanced level 3. Under problems in a very logical and systematic manner. 4. Some essential information for the user the heading "Know more" for clarifying some basic 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 sectors or in national laboratories at the very forefront of technology.

Table of Contents

Foreword Acknowledgement Preface Outcome Based Education Course Outcomes Abbreviations and Symbols List of Figures Guidelines for Teachers Guidelines for Students Unit 1: Introductory Mechanics. Unit 2: Conservation Principles. Unit 3: Dynamics of Particles. Unit 4: Oscillations. Unit 5: Rotational Motion. Unit 6: Dynamics of a Right Body. Table of Physical Constants Appendices Annexures References for Further learning CO and PO Attainment Table Index



Authors

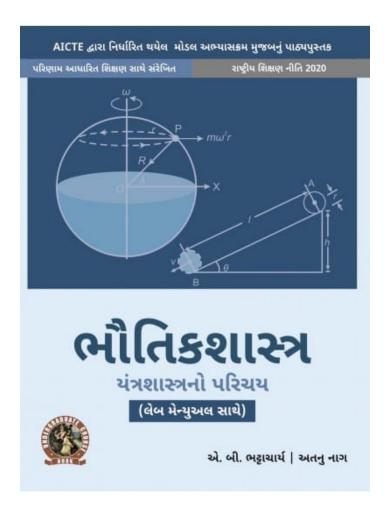
A. B. Bhattacharya

Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers.

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.





Physics (Introduction to Mechanics) (with Lab Manual)

Author: A. B. Bhattacharya

ISBN 13: 978-93-55381-66-8

ISBN 10: 93-55381-66-2

E-ISBN 13: 978-93-55381-66-8

Edition: First

Pages: 244

Type of book : Paperback

Weight (g): 330.00

Year: 2023

Language : Gujarati

Publisher: Khanna Publishing House

Categories:AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

SKU: 1725754182

Condition Type: New



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.



Table of Contents

| Foreword | Fo | re | w | O | rd |
|----------|----|----|---|---|----|
|----------|----|----|---|---|----|

Acknowledgement

Preface

Outcome Based Education

Course Outcomes

Abbreviations and Symbols

List of Figures

Guidelines for Teacher

Guidelines for Students

Unit 1: Electrostatics in Vacuum.

Unit 2: Electrostatics in Linear Dielectric Medium.

Unit 3: Magnetostatics.

Unit 4: Magnetostatics in Linear Dielectric Medium.

Unit 5: Faraday's Law.

Unit 6: Maxwell's Equations.

Unit 7: Electromagnetic Waves.

Table of Physical Constants

Appendices

Annexures

References for Further learning

CO and PO attainment Table

Index



Authors

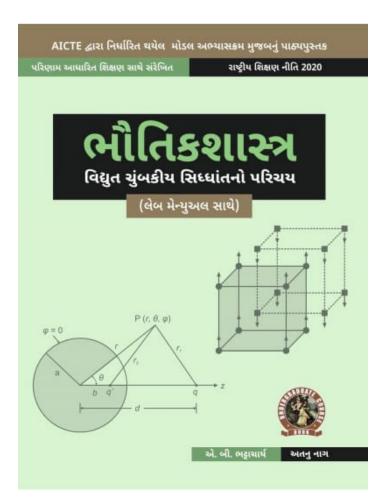
A. B. Bhattacharya

Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers.

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.





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

Author: A. B. Bhattacharya

ISBN 13: 978-93-55381-61-3

ISBN 10: 93-55381-61-1

E-ISBN 13: 978-93-55381-61-3

Edition : First

Pages: 328

Type of book : Paperback

Weight (g): 430.00

Year: 2023

Language : Gujarati

Publisher: Khanna Publishing House

Categories:

AICTE Prescribed Textbooks,

Ebooks, Gujarati Books

SKU: 1725593502

Condition Type: New



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.

Table of Contents

Foreword Acknowledgement Preface Outcome Based Education Course Outcomes Abbreviations and Symbols List of Figures Guidelines for Teacher Guidelines for Students Unit 1: Electrostatics in Vacuum. Unit 2: Electrostatics in Linear Dielectric Medium. Unit 3: Magnetostatics. Unit 4: Magnetostatics in Linear Dielectric Medium. Unit 5: Faraday's Law. Unit 6: Maxwell's Equations. Unit 7: Electromagnetic Waves. Table of Physical Constants Appendices Annexures References for Further learning CO and PO attainment Table Index



Authors

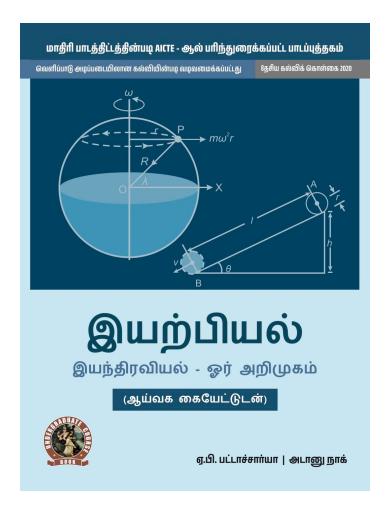
A. B. Bhattacharya

Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers.

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.





Physics (Introduction to Mechanics) (with Lab Manual)

Author: A. B. Bhattacharya

ISBN 13: 978-93-91505-76-9

ISBN 10: 93-91505-76-7

E-ISBN 13: 978-93-91505-76-9

Edition: First

Pages: 252

Type of book : Paperback

Weight (g): 330.00

Year: 2022

Language : Tamil

Publisher: Khanna Publishing House

Categories:AICTE Prescribed Textbooks,

Ebooks, Tamil Books

Condition Type: New



Product Description

Physics: Introduction to Mechanics 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 Mechanics to tackle 21 century and onward engineering challenges and address the related questions.

Some Salient features of the book:

- \in \in 1. Expose basic science to the engineering students to the fundamentals of physics and to enable them to get an insight of the subject.
- $\epsilon \in 2$. To develop knowledge on critical questions solved and supplementary problems covering all type of medium and advanced level
- € €3. Under problems in a very logical and systematic manner.
- € €4. Some essential information for the user the

Table of Contents

Foreword Acknowledgement Preface

Outcome Based Education

Course Outcomes Abbreviations and Symbols List of Figures Guidelines for Teachers Guidelines for Students Unit 1: Introductory Mechanics. Unit 2: Conservation Principles. Unit 3: Dynamics of Particles. Unit 4: Oscillations. Unit 5: Rotational Motion. Unit 6: Dynamics of a Right Body. Table of Physical Constants

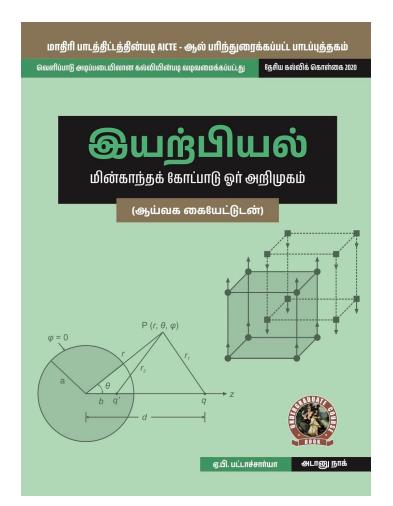
Appendices Annexures References for Further learning CO and PO Attainment Table Index



Authors

Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers. 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.





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

Author: A. B. Bhattacharya

ISBN 13: 978-93-91505-75-2

ISBN 10: 93-91505-75-9

E-ISBN 13: 978-93-91505-75-2

Edition: First

Pages: 344

Type of book : Paperback

Weight (g): 430.00

Year: 2022

Language : Tamil

Publisher: Khanna Publishing House

Categories:

AICTE Prescribed Textbooks,

Ebooks, Tamil Books

Condition Type: New



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:

- \in 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.



Table of Contents

Foreword

Acknowledgement

Preface

Outcome Based Education

Course Outcomes

Abbreviations and Symbols

List of Figures

Guidelines for Teacher

Guidelines for Students

Unit 1: Electrostatics in Vacuum.

Unit 2: Electrostatics in Linear Dielectric Medium.

Unit 3: Magnetostatics.

Unit 4: Magnetostatics in Linear Dielectric Medium.

Unit 5: Faraday's Law.

Unit 6: Maxwell's Equations.

Unit 7: Electromagnetic Waves.

Table of Physical Constants

Appendices

Annexures

References for Further learning

CO and PO attainment Table

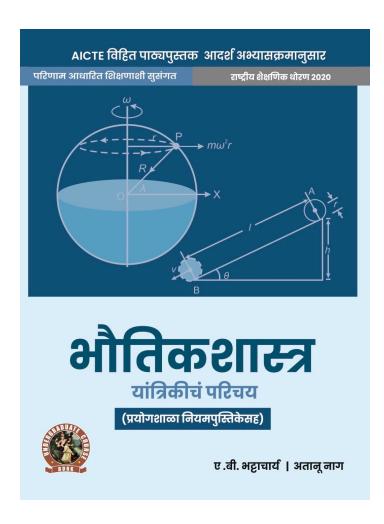
Index



Authors

A. B. Bhattacharya Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers. **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.





Physics (Introduction Mechanics)

Author: A. B. Bhattacharya

ISBN 13: 978-93-55380-30-2

ISBN 10: 93-55380-30-5

E-ISBN 13: 978-93-55380-30-2

Edition: First

Pages: 228

Type of book : Paperback

Weight (g): 330.00

Year: 2022

Language: Marathi

Publisher: Khanna Publishing House

Categories:AICTE Prescribed Textbooks,

Ebooks, Marathi Books

Condition Type: New



Product Description

Physics: Introduction to Mechanics 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 Mechanics to tackle 21 century and onward engineering challenges and address the related questions. Some Salient features of the book: Expose basic science to the engineering students to the fundamentals of physics and to enable them to get an insight of the subject. To develop knowledge on critical questions solved and supplementary problems covering all type of medium and advanced level. Under problems in a very logical and systematic manner. Some essential information for the user the heading "Know more" for clarifying some basic information as well as comprehensive synopsis of formulae for a quick revision of the basic principles. Constructive manner of presentation so that an Engineering degree students can prepare to work in different sectors or in national laboratories at the very forefront of technology.



Table of Contents

Foreword

Acknowledgement

Preface

Outcome Based Education

Course Outcomes

Abbreviations and Symbols

List of Figures

Guidelines for Teachers

Guidelines for Students

Unit 1: Introductory Mechanics.

Unit 2: Conservation Principles.

Unit 3: Dynamics of Particles.

Unit 4: Oscillations.

Unit 5: Rotational Motion.

Unit 6: Dynamics of a Right Body.

Table of Physical Constants

Appendices

Annexures

References for Further learning

CO and PO Attainment Table

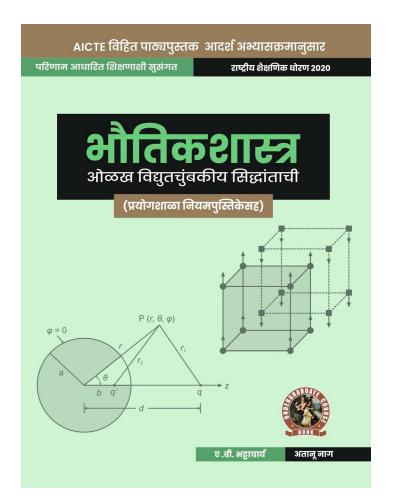
Index



Authors

Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers. 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.





Physics (Introduction to Electromagnetic Theory with Lab Manual)

Author: A. B. Bhattacharya

ISBN 13: 978-93-55380-29-6

ISBN 10: 93-55380-29-1

E-ISBN 13: 978-93-55380-29-6

Edition: First

Pages: 340

Type of book : Paperback

Weight (g): 430.00

Year: 2022

Language: Marathi

Publisher: Khanna Publishing House

Categories:

AICTE Prescribed Textbooks,

Ebooks, Marathi Books

Condition Type: New



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.

Table of Contents

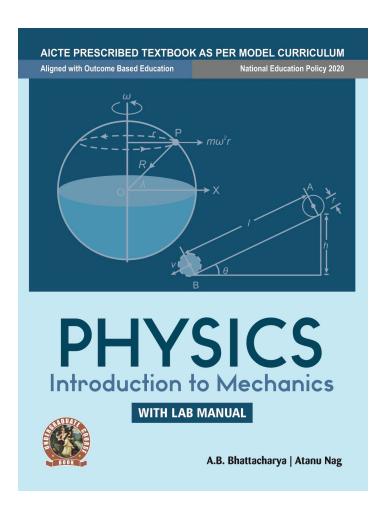
Foreword Acknowledgement Preface Outcome Based Education Course Outcomes Abbreviations and Symbols List of Figures Guidelines for Teacher Guidelines for Students Unit 1: Electrostatics in Vacuum. Unit 2: Electrostatics in Linear Dielectric Medium. Unit 3: Magnetostatics. Unit 4: Magnetostatics in Linear Dielectric Medium. Unit 5: Faraday's Law. Unit 6: Maxwell's Equations. Unit 7: Electromagnetic Waves. Table of Physical Constants Appendices Annexures References for Further learning CO and PO attainment Table Index



Authors

Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers. 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.





Physics (Introduction to Mechanics) (with Lab Manual)

Author: A. B. Bhattacharya

ISBN 13: 978-93-91505-05-9

ISBN 10: 93-91505-05-8

E-ISBN 13: 978-93-91505-05-9

Edition: First

Pages: 228

Type of book : Paperback

Weight (g): 330.00

Year: 2024

Language: English

Publisher: Khanna Publishing House

AICTE Prescribed Textbooks,

Categories: Applied Sciences, Ebooks,

English Books

Condition Type: New



Product Description

Physics: Introduction to Mechanics 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 Mechanics to tackle 21 century and onward engineering challenges and address the related questions. Some Salient features of the book: Expose basic science to the engineering students to the fundamentals of physics and to enable them to get an insight of the subject. To develop knowledge on critical questions solved and supplementary problems covering all type of medium and advanced level. Under problems in a very logical and systematic manner. Some essential information for the user the heading "Know more" for clarifying some basic information as well as comprehensive synopsis of formulae for a quick revision of the basic principles. Constructive manner of presentation so that an Engineering degree students can prepare to work in different sectors or in national laboratories at the very forefront of technology.

Table of Contents

Foreword Acknowledgement Preface

Outcome Based Education

Course Outcomes Abbreviations and Symbols List of Figures Guidelines for Teachers Guidelines for Students Unit 1: Introductory Mechanics. Unit 2: Conservation Principles. Unit 3: Dynamics of Particles. Unit 4: Oscillations. Unit 5: Rotational Motion. Unit 6: Dynamics of a Right Body. Table of Physical Constants

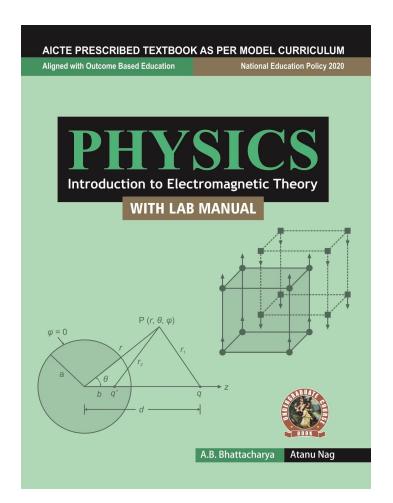
Appendices Annexures References for Further learning CO and PO Attainment Table Index



Authors

Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers. 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.





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

Author: A. B. Bhattacharya

ISBN 13: 978-93-91505-16-5

ISBN 10: 93-91505-16-3

E-ISBN 13: 978-93-91505-16-5

Edition: First

Pages: 308

Type of book : Paperback

Weight (g): 430.00

Year: 2022

Language: English

Publisher: Khanna Publishing House

AICTE Prescribed Textbooks,

Categories: Applied Sciences, Ebooks,

English Books

Condition Type: New



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: Expose basic science to the engineering students to the fundamentals of physics and to enable them to get an insight of the subject. 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. Some essential information for the users under the heading "know More" for clarifying some basic Information as well as comprehensive synopsis of formulae for a quick revision of the basic principles. 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.

Table of Contents

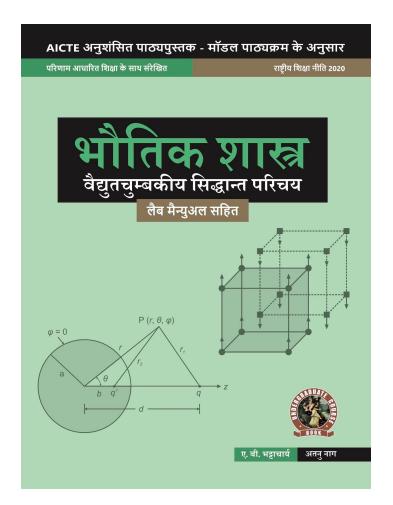
Foreword Acknowledgement Preface Outcome Based Education Course Outcomes Abbreviations and Symbols List of Figures Guidelines for Teacher Guidelines for Students Unit 1: Electrostatics in Vacuum. Unit 2: Electrostatics in Linear Dielectric Medium. Unit 3: Magnetostatics. Unit 4: Magnetostatics in Linear Dielectric Medium. Unit 5: Faraday's Law. Unit 6: Maxwell's Equations. Unit 7: Electromagnetic Waves. Table of Physical Constants Appendices Annexures References for Further learning CO and PO attainment Table Index



Authors

A. B. Bhattacharya Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers. **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.





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

Author: A. B. Bhattacharya

ISBN 13: 978-93-55381-30-9

ISBN 10: 93-55381-30-1

E-ISBN 13: 978-93-55381-30-9

Edition: First

Pages: 320

Type of book : Paperback

Weight (g): 440.00

Year: 2023

Language: Hindi

Publisher: Khanna Publishing House

Categories:

AICTE Prescribed Textbooks,

Ebooks, Hindi Books

Condition Type: New



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: Expose basic science to the engineering students to the fundamentals of physics and to enable them to get an insight of the subject. 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. Some essential information for the users under the heading "know More" for clarifying some basic Information as well as comprehensive synopsis of formulae for a quick revision of the basic principles. 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.

Table of Contents

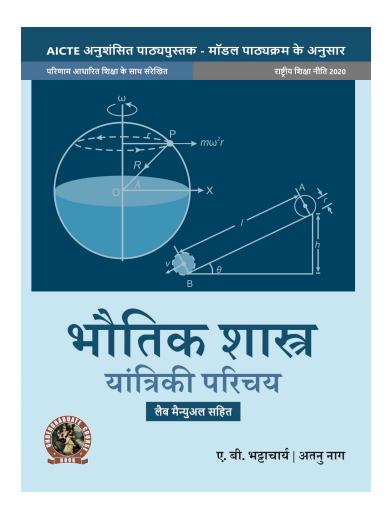
Foreword Acknowledgement Preface Outcome Based Education Course Outcomes Abbreviations and Symbols List of Figures Guidelines for Teacher Guidelines for Students Unit 1: Electrostatics in Vacuum. Unit 2: Electrostatics in Linear Dielectric Medium. Unit 3: Magnetostatics. Unit 4: Magnetostatics in Linear Dielectric Medium. Unit 5: Faraday's Law. Unit 6: Maxwell's Equations. Unit 7: Electromagnetic Waves. Table of Physical Constants Appendices Annexures References for Further learning CO and PO attainment Table Index



Authors

A. B. Bhattacharya Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers. **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.





Physics (Introduction to Mechanics) (with Lab Manual)

Author: A. B. Bhattacharya

ISBN 13: 978-93-55381-33-0

ISBN 10: 93-55381-33-6

E-ISBN 13: 978-93-55381-33-0

Edition: First

Pages: 240

Type of book : Paperback

Weight (g): 330.00

Year: 2023

Language: Hindi

Publisher: Khanna Publishing House

Categories:AICTE Prescribed Textbooks,

Ebooks, Hindi Books

Condition Type: New



Product Description

Physics: Introduction to Mechanics 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 Mechanics to tackle 21 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 type of medium and advanced level 3. Under problems in a very logical and systematic manner. 4. Some essential information for the user the heading "Know more" for clarifying some basic 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 sectors or in national laboratories at the very forefront of technology.



Table of Contents

Foreword

Acknowledgement

Preface

Outcome Based Education

Course Outcomes

Abbreviations and Symbols

List of Figures

Guidelines for Teachers

Guidelines for Students

Unit 1: Introductory Mechanics.

Unit 2: Conservation Principles.

Unit 3: Dynamics of Particles.

Unit 4: Oscillations.

Unit 5: Rotational Motion.

Unit 6: Dynamics of a Right Body.

Table of Physical Constants

Appendices

Annexures

References for Further learning

CO and PO Attainment Table

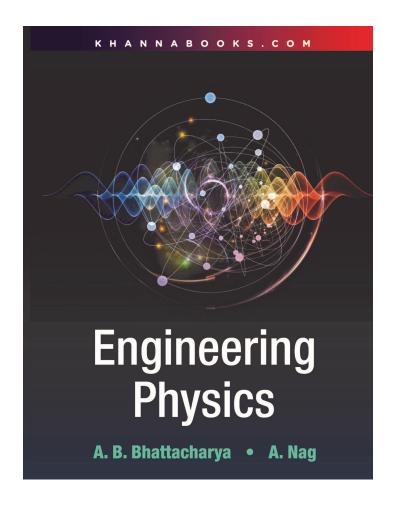
Index



Authors

Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers. 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.





Engineering Physics

Author: A. B. Bhattacharya

ISBN 13: 978-93-89139-07-5

ISBN 10: 93-89139-07-4

E-ISBN 13: 978-93-89139-07-5

Edition: First

Pages: 686

Type of book : Paperback

Weight (g): 960.00

Year: 2025

Language : English

Publisher: Khanna Publishing House

M.R.P: Rs 695.00

Categories : Applied Sciences

Condition Type: New

Country Origin: India

Product Description

In this book titled 'Engineering Physics,' the authors have given sincere efforts to explain the concepts of Physics in a very judicial way for the Engineering students of different branches so that they can acquire a reasonably good knowledge on the subject without devoting much time. In order to implement it successfully, the authors have maintained the following two features throughout: 1. Learning objectives are outlined at the beginning of each chapter followed by their item-wise presentation lucidly for a better understanding of the readers. 2. Each chapter is enriched with solved numerical problems including exercises and supplementary problems for the routine practice helpful for the examinations.



Table of Contents

SECTION I: INTRODUCTORY TO MECHANICS Chapter 1: Introductory Mathematical Concepts. Chapter 2: Newton's laws and central force Problems. Chapter 3: Motion of a Rigid Body. Chapter 4: Oscillations. SECTION II: WAVES AND OPTICS Chapter 5: Waves Motion. Chapter 6: Geometric Optics: The propagation of Light. Chapter 7: Wave Optics. Chapter 8: Polarization. Chapter 9: Lasers & Holography. SECTION III: INTRODUCTION TO ELECTROMAGNETIC THEORY Chapter 10: Electrostatics & Dielectrics. Chapter 11: Magnetostatics & Magnetic Properties. Chapter 12: Electromagnetic Induction &Faraday's Laws. Chapter 13: Maxwell's Equation & Electromagnetics Waves. SECTION IV: QUANTUM MECHANICS FOR ENGINEERS Chapter 14: Quantum Physics. Chapter 15: Quantum Mechanics. Chapter 16: Introduction to Molecular Bonding. Chapter 17: Statistical Mechanics. Chapter 18: Introduction to Solids.

Authors

A. B. Bhattacharya Prof. A. B. Bhattacharya, Pro-Vice-Chancellor of JIS University, did his M. Sc. and Ph. D. degree in Physics from the University of Calcutta. He did his Post-doc from the Massachusetts Institute of Technology, USA and subsequently joined in the Department of Physics, Kalyani University. He has published 256 Research papers in high-impact Journals and over 150 proceeding papers in conferences. He has successfully guided 24 scholars for their Ph.D. and has written a large number of invited articles in many Journals. He is the author of 29 textbooks written for engineering and science students and also for general readers from many reputed publishers like Infinity Science Press, Taylor & Francis, etc. International Institute of Success Awareness honored him with their most coveted Institutional and globally reputed "Glory of India Gold Medal" for remarkable contributions to India's national prestige. He is a Life Fellow of the Institution of Electronics and Telecommunication Engineers. **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.

