



Universities Press focusses on the publication of books in Science, Technology, Medicine and Management. Our books are distributed exclusively by **Orient Blackswan Private Limited**.

Registered office 3-6-752, Himayatnagar, Hyderabad 500 029, Telangana, India. Tel: (040) 2766 2849/2850. Fax: (040) 2764 2115. Email: centraloffice@orientblackswan.com

Other offices

'Tapovan', 46/47, Rama Rao Layout, Banashankari III Stage, Katriguppe, **Bengaluru** 560 085. Tel: (080) 2669 0258. Fax: (080) 2669 1907. Email: bangalore@orientblackswan.com

160 Anna Salai, **Chennai** 600 002. Tel: (044) 2852 3346/3358/2231. Email: chennai@orientblackswan.com

Gulmohar House, H.No. 7, Shanti Ram Das Path, Rehabari, A.K. Azad Road, **Guwahati** 781 008, District Kamrup (M) Assam. Email: guwahati@orientblackswan.com

3-6-752 Himayatnagar, **Hyderabad** 500 029. Tel: (040) 2766 2849/2850. Fax: (040) 2766 2115. Email: hyderabad@orientblackswan.com

17 Chittaranjan Avenue, **Kolkata** 700 072. Tel: (033) 2212 8052/8054. Fax: (033) 2212 9673. Email: kolkata@orientblackswan.com

R. Kamani Marg, Indian Mercantile Chambers, Ground Floor, Ballard Estate, **Mumbai** 400 001. Tel: (022) 2261 6918/19, 2269 5859. Email: mumbai@orientblackswan.com

3/5 Asaf Ali Road, New Delhi 110 002. Tel: (011) 2328 4294. Email: delhi@orientblackswan.com

1/24 Asaf Ali Road, **New Delhi** 110 002. Tel: (011) 2323 4957/4958. Fax: (011) 2323 9172. Email: delhi@orientblackswan.com

Plot No. 2, Block - E, Sector VIII, New Okhla Industrial Development Area (**Noida**), District Gautam Budh Nagar 201 301, Uttar Pradesh. Tel: (0120) 2424 367. Email: noida@orientblackswan.com

1st Floor, H.No. M/31, Road No. 25, Sri Krishna Nagar, **Patna** 800 001. Tel: (0612) 2522431. Email: patna@orientblackswan.com



Contents

NEET 1 JEE 6 Foundation Series Olympiads 14 Mathematics 16 Other Examinations Author Index 21

9

17

Title Index 22

Register with Us 23

NEET

REVISED EDITION

Biology for NEET, Volume 1 (Second Edition)

Abhimanvu Kumar Iha

Professor and Head, Department of Biotechnology School of Engineering and Technology, Sharda University Greater Noida, India

Runihun Mathur

Research Scholar, Dr. A.P.J. Abdul Kalam Technical University Lucknow, India

Meenakshi Iha

Research Scholar, Amity University, Raipur, India



This book aims to prepare medical aspirants for the NEET Biology examination.

Volume 1 explores the topics studied in Class 11. It provides in-depth coverage of the NEET syllabus and uses a target-oriented approach, with greater emphasis on the basics and gradual progression to advanced topics. It works towards maximizing students' knowledge of the subject while also enhancing their problem-solving and time management abilities.

Salient features:

- Complete coverage of all topics as per the NEET syllabus
- Content presented as bullet points, making it more reader-friendly
- Over 4800 exercise questions (with answers) categorized based on difficulty level
- Over 1900 questions (with answers) from • previous years' NEET papers
- About 575 assertion-reason questions with • answers
- Tips and tricks to help students remember and recall important concepts

Android app with daily practice problems, additional chapter-wise exercises, mock tests and previous years' solved NEET Biology question papers

Contents: About the Authors | Preface to the Second Edition | Preface to the First Edition Acknowledgements | The Living World | Biological Classification | Plant Kingdom | Animal Kingdom Morphology of Flowering Plants | Anatomy of Flowering Plants | Structural Organization in Animals | Cell: The Unit of Life | Biomolecules | Cell Cycle and Cell Division | Photosynthesis in Higher Plants | Respiration in Plants | Plant Growth and Development | Breathing and Exchange of Gases | Body Fluids and Circulation | Excretory Products and their Elimination | Locomotion and Movement | Neural Control and Coordination | Chemical Coordination and Integration | Class 11 Questions and Solutions from Previous Years' NEET Biology Question Papers

2024	644 рр.	Paperback
978-93-93330-89-5		₹ 950.00

REVISED EDITION

Biology for NEET, Volume 2 (Second Edition)

Abhimanyu Kumar Jha

Professor and Head, Department of Biotechnology School of Engineering and Technology, Sharda University Greater Noida, India

Runihun Mathur

Research Scholar, Dr. A.P.J. Abdul Kalam Technical University Lucknow, India

Meenakshi Jha

Research Scholar, Amity University, Raipur, India



This book aims to prepare medical aspirants for the NEET Biology examination.

Volume 2 explores the topics studied in Class 12. It provides in-depth coverage of the NEET syllabus and uses a target-oriented approach,

with greater emphasis on the basics and gradual progression to advanced topics. It works towards maximizing students' knowledge of the subject while also enhancing their problem-solving and time management abilities.

Salient features:

- Complete coverage of all topics as per the NEET syllabus
- Content presented as bullet points, making it more reader-friendly
- Over 2500 exercise questions (with answers) categorized based on difficulty level
- Over 1200 questions (with answers) from previous years' NEET papers
- About 380 assertion-reason questions with answers
- Tips and tricks to help students remember and recall important concepts
- Android app with daily practice problems, additional chapter-wise exercises, mock tests and previous years' solved NEET Biology question papers

Contents: About the Authors | Preface to the Second Edition | Preface to the First Edition | Acknowledgements | Sexual Reproduction in Flowering Plants | Human Reproduction | Reproductive Health | Principles of Inheritance and Variation | Molecular Basis of Inheritance | Evolution | Human Health and Disease | Microbes in Human Welfare | Biotechnology – Principles and Practices | Biotechnology and Its Applications | Organisms and Populations | Ecosystem | Biodiversity and Its Conservation | Mock Test I |Mock Test II | Previous Years' Solved Question Papers

2024	456 pp.	Paperback
978-93-93330-88-8		₹ 695.00

Chemistry for NEET, Volume 1

• NEW

M P Sidana

Founder, Wisdom Classes by Sidana Amritsar, India



Chemistry for NEET, Volumes 1 and 2 are designed to introduce students to the in-depth understanding required to prepare medical aspirants for the NEET Chemistry examination. Volume 1 covers the topics studied in Class 11 with a wide range of objectivetype questions aligned with current exam patterns. It equips students with the skills needed to tackle challenging problems efficiently, test their analytical ability, objective problem-solving approach, and application of basic principles and concepts from Organic, Inorganic and Physical Chemistry within a limited time frame. The book employs a step-bystep approach and specialised techniques to master both the theoretical and numerical aspects of the subject, meeting all the core standards required to ace the NEET.

Salient features

- Complete and comprehensive coverage of the 2024 NEET syllabus
- Generous use of figures, tables and equations
- Over 5000 MCQs, organised topic-wise
- Over 400 Assertion/Reason questions
- Over 50 Match the Following questions
- Over 130 worked out problems
- Questions from previous years' competitive examinations
- Answers and solutions to all questions
- The app accompanying this book supports additional chapter-wise MCQs and previous years' solved NEET Chemistry question papers

Contents: *Preface* | *Acknowledgements* | Basic Concepts of Chemistry | Structure of Atom | Classification of Elements and Periodicity in Properties | Chemical Bonding | States of Matter | Chemical Thermodynamics | Chemical Equilibrium | Ionic Equilibrium | Redox Reactions | Hydrogen and its Compounds | s-Block Elements | p-Block Elements | Organic Chemistry | Hydrocarbons

2025	852 pp.	Paperback
978-93-93330-75-8		₹ 1275.00

Chemistry for NEET, Volume 2



M P Sidana

Founder, Wisdom Classes by Sidana Amritsar, India



Chemistry for NEET, Volumes 1 and 2 are designed to introduce students to the in-depth understanding required to prepare medical aspirants for the NEET Chemistry examination. Volume 2 covers the topics studied in Class 12 with a wide range of objectivetype questions aligned with current exam patterns. It equips students with the skills needed to tackle challenging problems efficiently, test their analytical ability, objective problem-solving approach, and application of basic principles and concepts from Organic, Inorganic and Physical Chemistry within a limited time frame. The book employs a step-bystep approach and specialised techniques to master both the theoretical and numerical aspects of the subject, meeting all the core standards required to ace the NEET.

Fundamental Problems in Organic Chemistry for NEET

Shubh Karan Choudhary

Formerly Vice President, Sarvottam Career Institute, Kota, and Senior Faculty in Chemistry, ALLEN Career Institute, Kota, India

Rohit Agrawal

Fomerly Joint Director, Nucleus, Kota, and Faculty Member, ALLEN Career Institute, Kota, India



This book is a comprehensive compendium of exercises and problems in Organic Chemistry with an emphasis on the new NEET syllabus. The questions featured in this book have been carefully selected from NCERT, NCERT Exemplar and previous NEET exams.

This book also presents answers to all questions and detailed solutions, as well as relevant diagrams and reactions, or hints to selected questions. The main aim in doing so is to enable students to assess and improve their problem-solving ability.

Salient features

- Provides over 2,000 exercise questions
- Presents answers to all questions
- Provides hints/solutions to critical questions
- Designed according to the latest National Medical Commission and NCERT syllabi
- Includes Assertion–Reason, Statement-based and Matrix Match questions according to the latest NEET and NCERT exam pattern
- Within each chapter, questions given topic-wise and categorized by difficulty level
- Includes Android app with daily practice problems

Contents: *Preface and Acknowledgements* | Nomenclature of Organic Compounds | General Organic Chemistry | Isomerism | Hydrocarbons | Purification Methods, Qualitative and Quantitative Analysis | Haloalkanes and Haloarenes | Alcohol, Phenol and Ether | Aldehyde, Ketone and Carboxylic Acid | Amines | Aromatic Compounds | Biomolecules

2025	380 pp.	Paperback
978-93-93330-77-2		₹ 625.00

tical and numerical aspects of the g all the core standards required to problems in

Objective Biology for NEET, Volume 1

Board of Editors

4



This book provides all the knowledge, practice and coaching that students need to crack the NEET Biology exam.

Volume 1 deals with the topics covered in Class 11, comprising the living world; biological classification; the plant and animal kingdoms; morphology and anatomy of flowering plants; structural organisation in animals; cell, cell cycle and cell division; biomolecules; transportation, mineral nutrition, photosynthesis, respiration and growth and development in plants; digestion and absorption; breathing and exchange of gases, body fluids and their circulation; excretory products and their elimination; locomotion and movement; neural control and coordination; and chemical control and integration.

Salient features

- Comprehensive compilation of objective questions from previous years' NEET papers
- Exercises comprise multiple choice, true/ false, fill in the blank, match the following and diagram-oriented questions
- Indispensable compendium enables students to prepare with efficiency and accuracy
- One-stop knowledge and practice treasure-trove for students that will help them to hone their time management skills and create a unique strategic approach for the exam
- The Android app accompanying the book contains practice problems, mock tests, solved NEET question papers from 2020 onwards and solutions to NCERT Exemplar and practice questions

Contents: *Preface* | The Living World | Biological Classification | Plant Kingdom | Animal Kingdom

| Morphology of Flowering Plants | Anatomy of Flowering Plants | Structural Organisation in Animals | Cell: The Unit of Life | Biomolecules | Cell Cycle and Cell Division | Transport in Plants | Mineral Nutrition | Photosynthesis in Higher Plants | Respiration in Plants | Plant Growth and Development | Digestion and Absorption | Breathing and Exchange of Gases | Body Fluids and their Circulation | Excretory Products and their Elimination | Locomotion and Movement | Neural Control and Coordination | Chemical Control and Integration

2022	452 pp.	Paperback
978-93-89211-70-2		₹600.00

Objective Biology for NEET, Volume 2

Board of Editors



This book provides all the knowledge, practice and coaching that students need to crack the NEET Biology exam.

Volume 2 deals with the topics covered in Class 12, comprising reproduction in organisms; sexual reproduction in flowering plants; human reproduction; reproductive health; principles of inheritance and variation; molecular basis of inheritance; evolution; human health and diseases; strategies for enhancement in food production; microbes in human welfare; biotechnology– principles, processes and applications; organism and population; ecosystem; biodiversity and conservation; and environmental issues.

Salient features

- Comprehensive compilation of objective questions from previous years' NEET papers
- Exercises comprise multiple choice, true/ false, fill in the blank, match the following and diagram-oriented questions
- Indispensable compendium enables students to prepare with efficiency and accuracy

Prices are subject to change without notice

- One-stop knowledge and practice treasure-trove for students that will help them to hone their time management skills and create a unique strategic approach for the exam
- The Android app accompanying the book contains practice problems, mock tests, solved NEET question papers from 2020 onwards and solutions to NCERT Exemplar and practice questions

Contents: *Preface* | Reproduction in Organisms | Sexual Reproduction in Flowering Plants | Human Reproduction | Reproductive Health | Principles of Inheritance and Variation | Molecular Basis of Inheritance | Evolution | Human Health and Diseases | Strategies for Enhancement in Food Production | Microbes in Human Welfare | Biotechnology – Principles and Processes | Biotechnology and its Applications | Organism and Population | Ecosystem | Biodiversity and Conservation | Environmental Issues

2022	344 pp.	Paperback
978-93-89211-71-9		₹ 375.00

Physics for NEET, Volume 1

SAS Kirmani

Founder, Erose Educational Infotech Private Limited, New Delhi, India



This book conforms to the latest NEET syllabus. Volume 1 of the book covers the NCERT syllabus for Class XI. The questions compiled in the book are in strict accordance with the current trend seen in the CBSE and NEET examinations. The book provides a clear and logical presentation of the basic concepts, principles and their applications. It discusses a broad range of problems with sound physical arguments and problem-solving methodology. Each chapter is supplemented with a set of 'Quick Questions' framed under 'Quiz' and 'Think and Grow' sections to promote logical thinking and a spirit of inquiry among the students. The book also has app-based content that includes daily practice problems and mock tests for quick revision

Test Preparation / Competitive Examinations

Contents: Units and Dimensions | Kinematics | Laws of Motion | Work, Energy, Power | Motion of System of Particles and Rigid Body | Gravitation | Properties of Bulk Matter | Thermodynamics | Behaviour of Perfect Gas and Kinetic Theory | Oscillations and Waves

2022	784 pp.	Paperback
978-93-89211-67-2		₹ 795.00

Physics for NEET, Volume 2

SAS Kirmani

Founder, Erose Educational Infotech Private Limited, New Delhi, India



This book conforms to the latest NEET syllabus. Volume 2 of the book covers the NCERT syllabus for Class XII. The questions compiled in the book are in strict accordance with the current trend seen in the CBSE and NEET examinations. The book provides a clear and logical presentation of the basic concepts, principles and their applications. It discusses a broad range of problems with sound physical arguments and problem-solving methodology. Each chapter is supplemented with a set of 'Quick Questions' framed under 'Quiz' and 'Think and Grow' sections to promote logical thinking and a spirit of inquiry among the students. The book also has app-based content that includes daily practice problems and mock tests for quick revision.

Contents: Electrostatics | Current Electricity | Magnetic Effects of Current and Magnetism | Electromagnetic Induction and Alternating Current | Electromagnetic Waves | Optics | Dual Nature of

www.universitiespress.com

Matter and Radiation | Atoms and Nuclei | Electronic Devices

2022	624 pp.	Paperback
978-93-89211-68-9		₹ 625.00

JEE

Educative JEE (Third Edition)

K D Joshi

Adjunct Faculty, Department of Mathematics, College of Engineering, Pune, India



The Joint Entrance Examination (JEE), the gateway to the IITs-India's prestigious institutes of learning-is considered as one of the toughest examinations conducted in India. Inevitably, there is competition to succeed in it. While such a competition is not bad in itself, the undesirable consequence is that in the mad rush to solve problems, the educative value of a problem is often lost. The thought process of students is thus skewed into solving problems (mostly by analogy) without thoroughly understanding the basic concepts underlying the problems and without a corresponding development of the thinking ability. Consequently, they are often unable to offer logical negation of a statement, even though they are intellectually capable of it.

This book is an attempt to lay before students both the concepts as well as the process of solving problems at the JEE. The problems have been collected mostly from JEE papers ranging over a period of two decades. The thrust is not so much on solving the problems as in the assimilation of the theory behind them and learning a few related new concepts. The solutions then come as natural corollaries. The book also contains some helpful tips aimed at sharpening the thinking ability and increasing the mathematical maturity of the student. New problems and an occasional new solution to an existing problem were added in the second edition. In this edition, two appendices, one on matrices and the other on solid coordinate geometry, have been added in view of the changes in JEE syllabus. Further, all the errors in the earlier two editions, listed as errata in the author's blog, have been corrected, and occasionally, a new solution to an existing problem has been included.

Contents: Preface to the Third Edition | Preface to the First Edition | Disclaimer about IEE | Part-I Precalculus Mathematics: Counting Problems | Basic Algebra | Theory of Equations | Number Theory | Binomial Identities | Inequalities | Trigonometric Identities | Geometry | Coordinate Geometry Trigonometric Equations | Solution of Triangles | Heights and Distances | Answers to exercises in Part - I | Part -II Calculus, Vectors, Probability, Review: Maxima, Minima and Concavity | Trigonometric Optimisation | Limits, Continuity and Derivatives | Theoretical Calculus | Areas and Antiderivatives | Definite Integrals | Differential Equations | Functional Equations and Relations | Vectors | Finitistic Probability | Infinitistic Probability | Miscellaneous Tips and Review | Answers to exercises in Part - II | Appendix 1: More on matrices | Appendix 2: Solid coordinate geometry | Index

2015	1100 pp.	Paperback
978-81-7371-945-5		₹ 1,650.00

Mathematics for JEE, Volume 1 (

FORTHCOMING

SAS Kirmani

Founder, Erose Educational Infotech Private Limited, New Delhi, India

Kumar Supravin

Mathematics Faculty, Erose Educational Infotech Private Limited, New Delhi, India

Nishu Kumar Govil

IIT-JEE Mentor, Erose Educational Infotech Private Limited, New Delhi, India

This book focusses the topics of Mathematics prescribed in the NCERT syllabus for Class XI. It provides a clear and logical presentation of the basic concepts, principles and their applications. Spread across 13 chapters, the book discusses a broad range of problems with sound physical arguments and problem-solving methodology. The questions have been complied to reflect the relative weightage given to the various topics in the current pattern of the JEE Main and Advanced examinations. Replete with solved examples, MCQs, Integer and Numerical Value, Comprehension and Matrixmatching type questions at the end of each chapter, it is an ideal companion for students seeking to crack the JEE Main and Advanced Exams.

Contents: Sets | Relations and Functions Trigonometric Functions | Complex Numbers and Quadratic Equations | Permutations and Combinations | Binomial Theorem | Sequence and Series | Straight Lines | Conic Section | Three-dimensional Geometry | Limits | Statistics | Probability

Mathematics for JEE, Volume 2

FORTHCOMING

SAS Kirmani

Founder, Erose Educational Infotech Private Limited, New Delhi, India

Kumar Supravin

Mathematics Faculty, Erose Educational Infotech Private Limited, New Delhi, India

Nishu Kumar Govil

IIT-JEE Mentor, Erose Educational Infotech Private Limited. New Delhi, India

This book focusses the topics of Mathematics prescribed in the NCERT syllabus for Class XII. It provides a clear and logical presentation of the basic concepts, principles and their applications. Spread across 12 chapters, the book discusses a broad range of problems with sound physical arguments and problem-solving methodology. The questions have been complied to reflect the relative weightage given to the various topics in the current pattern of the JEE Main and Advanced examinations. Replete with solved examples, MCQs, Integer and Numerical Value, Comprehension and Matrixmatching type questions at the end of each chapter, it is an ideal companion for students seeking to crack the JEE Main and Advanced Exams.

Contents: Relations and Functions | Inverse Trigonometric Functions | Matrices | Determinants | Continuity and Differentiability | Application of Derivatives | Integrals | Application of Integrals Differential Equations | Vector | Three-dimensional Geometry | Probability

Test Preparation / Competitive Examinations

Objective Questions in Mathematics for JEE Main and Advanced

Pratyush Kumar Singh

Founder of an IIT coaching centre in Ranchi, India



This book has been designed to provide students with intensive as well as extensive practice of the questions and problems they will encounter in the JEE Mathematics exams. The aim of this book is to improve and enhance the aptitude, proficiency and problem-solving ability of students in Mathematics to enable them to crown their endeavours with success.

Salient features

- Key concepts at the beginning of every chapter to summarise the important principles
- Key equations and formulas presented for every topic
- Detailed, step-by-step solutions to all questions and problems
- Lavish use of figures to illustrate concepts and problems
- Appendices with previous years' JEE Main and Advanced solved questions
- Android app with practice problems and solutions to the latest JEE Mathematics paper
- Video lectures available at www.universitiespress. com/jeemaths

Contents: *Preface* | *Acknowledgements* | **PART** I: ALGEBRA | Theory of Equations | Quadratic Equations | Sequences and Series | Binomial Theorem | Complex Numbers | Permutations and Combinations | Probability | Matrices | Vector Algebra | PART II: **CALCULUS** | Algebraic Functions | Trigonometric Functions | Trigonometric Equations | Solution of Triangles | Inverse Trigonometric Functions Exponential and Log Functions | Limits and Continuity | Investigating Functions | Differentiation

| Application of Derivatives | Indefinite Integration | Definite Integration | Differentiation of an Integral | Area Between Curves | Sum of a Series and Definite Integral | Differential Equations | **PART III: COORDINATE GEOMETRY** | Straight Line | Circle | Parabola | Ellipse | Hyperbola | 3D Geometry | *Appendix*

2022	452 pp.	Paperback
978-938-9211-87-0		₹ 475.00

Objective Questions in Physics for JEE Main and Advanced

Pratyush Kumar Singh

Founder of an IIT coaching centre in Ranchi, India



This book has been designed to provide students with intensive as well as extensive practice of the questions and problems they will encounter in the JEE Physics exams. The aim of this book is to improve and enhance the aptitude, proficiency and problem-solving ability of students in Physics to enable them to crown their endeavours with success.

Salient features

- Key concepts at the beginning of every chapter to summarise the important principles
- Key equations and formulas presented for every topic
- Detailed, step-by-step solutions to all questions and problems
- Lavish use of figures to illustrate concepts and problems
- Appendices with previous years' JEE Main and Advanced solved questions
- Android app with practice problems and solutions to the latest JEE Physics paper
- Video lectures available at www.universitiespress. com/jeephysics

www.universitiespress.com

Contents: Preface | Acknowledgements | PART I: MECHANICS | Physical Quantities and Measurement | Kinematics | Force and Motion | Work-Energy | Linear Momentum and Collision Torque and Angular Momentum | Elasticity Fluid Mechanics | Surface Tension and Viscosity | Gravitation | Simple Harmonic Motion | Mechanical Waves | PART II: THERMODYNAMICS Calorimetry, Thermal Expansion and Heat Transfer Gas Laws and First Law of Thermodynamics PART III: ELECTRICITY AND MAGNETISM Electrostatic Field and Potential | Current Electricity | Capacitors | Magnetism | Electromagnetic Induction | AC Circuits and EM Waves | PART IV: OPTICS AND MODERN PHYSICS | Geometrical Optics | Atomic Physics | Nuclear Physics | Wave Optics | Appendix I: Previous Years' JEE Main Questions and Solutions | Appendix II: Previous Years' JEE Advanced **Ouestions and Solutions**

2022	440 pp.	Paperback
978-93-89211-85-6		₹ 475.00

• NEW

Physics for JEE Main, Volume 1

Sheikh Ashfaque Ali

Deputy Registrar, Aliah University, Kolkata, India



Physics for JEE Main, Volume 1 caters to the needs of students preparing for JEE. The questions compiled are in strict accordance with the current trend seen in JEE exam pattern. The book provides a clear and logical presentation of the basic concepts, principles and their applications. It discusses a broad range of problems with sound physical arguments and problem-solving methodology. In addition, it also discusses unique shortcut methods to tackle complex problems, for the students' benefit.

Contents: Unit, Dimension and Measurement | Vectors | Motion in a Straight Line | Two-dimensional Motion | Newton's Laws of Motion | Friction |

www.universitiespress.com

Rotational Motion | Centre of Mass and Equilibrium of a Body | Work, Power and Energy | Gravitation | Elasticity | Surface Tension | Hydrodynamics | Hydrostatics | Thermal Properties of Matter – I: Thermometry, Thermal Expansion and Calorimetry | Thermal Properties of Matter – II: Transmission of Heat | Kinetic Theory of Gases | Thermodynamics | Simple Harmonic Motion | Waves

2025	792 pp.	Paperback
978-81-954009-7-3		₹ 1,200.00

FORTHCOMING

Physics for JEE Main, Volume 2

Sheikh Ashfaque Ali

Deputy Registrar, Aliah University, Kolkata, India

This second volume of *Physics for JEE Main* covers the NCERT syllabus for Class XII. The book provides a clear and logical presentation of the basic concepts, principles and their applications. It discusses a broad range of problems with sound physical arguments and problem solving methodology. Replete with MCQs supported by answer keys and detailed solutions, the questions have been grouped according to their level of difficulty and compiled to reflect the current pattern seen in the CBSE and JEE examinations.

Contents: Electric Field and Potential | Capacitance and Capacitor | Electric Current and DC Circuits | Electromagnetism | Magnetism and Matter | Electromagnetic Induction | Alternating Current | Electromagnetic Wave | Ray Optics and Optical Instruments | Wave Optics | Photoelectric Effect and Matter Waves | Atoms and Nuclei | Semiconductors and Electronic Devices | Experimental Skills

FOUNDATION SERIES

Biology Foundation for Class VIII

Abhimanyu Kumar Jha

Professor and Head of the Department of Biotechnology, School of Engineering and Technology (SET), Sharda University, Greater Noida, India

Abhinav Datta

Biology Teacher, Shiv Nadar School, Noida, India

Mahek Sharan

Research Scholar in Zoology, Banaras Hindu University, Varanasi, India

Test Preparation / Competitive Examinations



This book is an excellent preparation resource in Biology for students of Class VIII appearing for the CBSE and ICSE examinations. It provides clear and concise explanations and covers all the topics in these syllabi, along with a variety of exercise questions drawn from the current and previous years' question papers. Answers or hints are provided for every single question.

This book provides a strong foundation that students can build on to realise their academic aspirations.

Salient features

- Covers the CBSE and ICSE syllabi and serves as a base for competitive examination preparation
- Presents clearly defined objectives at the beginning of every chapter
- Explains all topics and concepts in a concise manner, with lavish use of illustrations
- Provides a summary at the end of every chapter for quick reference
- Demarcates exercises as Practice Questions (school exam-based) and Competition Window (competitive exam-based)
- Includes 1,385 school exam-based and competitive exam-based questions
- Android app offers additional chapter-wise MCQs

Contents: *About the Authors* | *Preface* | *Acknowledgements* | Cells: Structure and Functions | Adolescence | Reproduction in Animals | The Circulatory System | Neural and Endocrine Systems | Microorganisms: Friends or Foes? | Health, Hygiene and First Aid | Transportation and Reproduction in Plants | Crop Production and Management | Ecosystem and Biodiversity | Conservation of Plants and Animals

2023	240 pp.	Paperback
978-93-93330-55-0		₹ 425.00

9

Prices are subject to change without notice

• NEW

Biology Foundation for Class IX

Abhimanyu Kumar Jha

Professor and Head of the Department of Biotechnology, School of Engineering and Technology (SET), Sharda University, Greater Noida, India

Archana Awasthi

10

Biology Teacher, Delhi Public School, Ghaziabad, India

Mahek Sharan

Research Scholar in Zoology, Banaras Hindu University, Varanasi, India



This book is an excellent preparation resource in Biology for students of Class IX appearing for the CBSE and ICSE examinations. It provides clear and concise explanations and covers all the topics in these syllabi, along with a variety of exercise questions drawn from the current and previous years' question papers. Answers or hints are provided for every single question.

This book provides a strong foundation that students can build on to realise their academic aspirations.

Salient features

- Covers the CBSE and ICSE syllabi and serves as a base for competitive examination preparation
- Presents clearly defined objectives at the beginning of every chapter
- Explains all topics and concepts in a concise manner, with lavish use of illustrations
- Provides a summary at the end of every chapter for quick reference
- Demarcates exercises as Practice Questions (school exam-based) and Competition Window (competitive exam-based)
- Includes 1,900 school exam-based and competitive exam-based questions
- Android app offers additional chapter-wise MCQs

Contents: About the Authors | Preface | Acknowledgements | Introduction to Biology | Cells: The Fundamental Units of Life | Tissues | Diversity in Living Organisms | Flowers and Pollination | Seeds, Germination and Fertilisation | Natural Resources | Improvements in Food Resources | Skin and Locomotion | Nutrition and Digestion | Respiration in Plants and Animals | Economic Importance of Bacteria and Fungi | Why Do We Fall Ill? | Waste Generation and Management

2023	300 pp.	Paperback
978-93-93330-56-7		₹ 525.00

Biology Foundation for Class X

• NEW

Abhimanyu Kumar Jha

Professor and Head of the Department of Biotechnology, School of Engineering and Technology (SET), Sharda University, Greater Noida, India

Balasubramanian Velramar

Assistant Professor, Amity Institute of Biotechnology, Amity University Chhattisgarh, Raipur, India

Archana Awasthi

Biology Teacher, Delhi Public School, Ghaziabad, India

Saurabh Gupta

Research Scholar, Amity University Chhattisgarh, Raipur, India



This book is an excellent preparation resource in Biology for students of Class X appearing for the CBSE and ICSE Board examinations. It provides clear and concise explanations and covers all the topics in these syllabi, along with a variety of exercise questions drawn from the current and previous years' question papers. Answers or hints are provided for every single question.

This book provides a strong foundation that students can build on to realise their academic aspirations.

www.universitiespress.com

Salient features

- Covers the CBSE and ICSE syllabi and serves as a base for competitive examination preparation
- Presents clearly defined objectives at the beginning of every chapter
- Explains all topics and concepts in a concise manner, with lavish use of illustrations
- Provides a summary at the end of every chapter for quick reference
- Demarcates exercises as Practice Questions (school exam-based) and Competition Window (competitive exam-based)
- Includes 2,100 school exam-based and competitive exam-based questions
- Android app offers additional chapter-wise MCQs

Contents: About the Authors | List of Contributors | Preface | Acknowledgements | Cells: The Structural and Functional Units of Life | Structure of Chromosomes, Cell Cycle and Cell Division | Life Processes | Absorption by the Roots: The Processes Involved | Transpiration | Photosynthesis: Provider of Food for All | Genetics and Evolution | Control and Coordination | The Nervous System | The Circulatory System | The Excretory System | The Endocrine Glands - The Producers of Chemical Messengers | How Do Organisms Reproduce? | The Reproductive System | Population - The Increasing Numbers and Rising Problems | Aids to Health | Health Organisations | Our Environment | Pollution - A Rising Environmental Problem | Management of Natural Resources

2023	352 pp.	Paperback
978-93-93330-54-3		₹ 575.00

Chemistry Foundation for Class VIII

Atul Singhal

Academic Head, Aakash Institute, Modipuram, Meerut, India



This book is a comprehensive resource for students of Class VIII preparing for the CBSE and ICSE Board examinations. It provides clear and concise explanations and covers all topics in these syllabi, along with a variety of problems drawn from the current and previous years' question papers. Solutions are provided to every single problem along with hints to crack the tough ones. The book provides a strong foundation which the increasing competition mandates.

Test Preparation / Competitive Examinations

Salient features

- The entire curriculum is covered in a lucid manner accompanied by illustrations, equations and formulae.
- It covers the CBSE and ICSE syllabi and lays the foundation for preparation for competitive examinations.
- Solutions to all problems have been provided (there is no unsolved exercise).
- The exercises are divided into Practice questions (school exam-based) and Competition window (competitive exam-based).
- Various types of questions are included—very short, short and long.
- Topic-wise and level-wise MCQs in each chapter (first of its kind).
- Related advanced level concepts highlighted in boxes (Knowledge booster).
- Segment-wise questions and solutions for school exams in each chapter.
- Provides a strong foundation for students of different state boards.
- The book is accompanied by the Orient BlackSwan Smart App that provides chapterwise NEET-JEE type MCQs with solutions.

Contents: *Preface* | *Acknowledgements* | Matter | Elements, Compounds and Mixtures | The Language of Chemistry | Chemical Reactions | Atomic Structure | Hydrogen | Water | Carbon and its Compounds | Synthetic Fibres and Plastics | Materials: Metals and Nonmetals | Coal and Petroleum | Combustion and Flame | Pollution of Air and Water | *Appendices*

2023	288 pp.	Paperback
978-93-93330-32-1		₹ 500.00

Prices are subject to change without notice

Prices updated on 20-01-2025. These prices are subject to change without notice.

• NEW

Chemistry Foundation for Class IX

Atul Singhal

12

Academic Head, Aakash Institute, Modipuram, Meerut, India



This book is a comprehensive resource for students of Class IX preparing for the CBSE and ICSE Board examinations. It provides clear and concise explanations and covers all topics in these syllabi, along with a variety of problems drawn from the current and previous years' question papers. Solutions are provided to every single problem along with hints to crack the tough ones. The book provides a strong foundation which the increasing competition mandates.

Salient features

- The entire curriculum is covered in a lucid manner accompanied by illustrations, equations and formulae.
- It covers the CBSE and ICSE syllabi and lays the foundation for preparation for competitive examinations.
- Solutions to all problems have been provided (there is no unsolved exercise).
- The exercises are divided into Practice questions (school exam-based) and Competition window (competitive exam-based).
- Various types of questions are included—very short, short and long.
- Topic-wise and level-wise MCQs in each chapter (first of its kind).
- Related advanced level concepts highlighted in boxes (Knowledge booster).
- Segment-wise questions and solutions for school exams in each chapter.
- Provides a strong foundation for students of different state boards.
- The book is accompanied by the Orient BlackSwan Smart App that provides chapter-

wise NEET–JEE type MCQs and Year-wise Olympiad Question Papers with solutions.

Contents: *Preface* | *Acknowledgements* | Matter in Our Surroundings | Is Matter Around Us Pure? | Atoms and Molecules | Chemical Reactions and Equations | Atomic Structure | The Periodic Table | Chemical Bonding | Gaseous State | Water | Hydrogen | Atmospheric Pollution

2023	280 pp.	Paperback
978-93-93330-30-7		₹ 500.00

Chemistry Foundation for Class X

Atul Singhal

Academic Head, Aakash Institute, Modipuram, Meerut, India



This book is a comprehensive resource for students of Class X preparing for the CBSE and ICSE Board examinations. It provides clear and concise explanations and covers all topics in these syllabi, along with a variety of problems drawn from the current and previous years' question papers. Solutions are provided to every single problem along with hints to crack the tough ones. The book provides a strong foundation which the increasing competition mandates.

Salient features

- The entire curriculum is covered in a lucid manner accompanied by illustrations, equations and formulae.
- It covers the CBSE and ICSE syllabi and lays the foundation for preparation for competitive examinations.
- Solutions to all problems have been provided (there is no unsolved exercise).
- The exercises are divided into Practice questions (school exam-based) and Competition window (competitive exam-based).

- Various types of questions are included—very short, short and long.
- Topic-wise and level-wise MCQs in each chapter (first of its kind).
- Related advanced level concepts highlighted in boxes (Knowledge booster).
- Segment-wise questions and solutions for school exams in each chapter.
- Provides a strong foundation for students of different state boards.
- The book is accompanied by the Orient BlackSwan Smart App that provides chapterwise NEET–JEE type MCQs, year-wise KVPY papers and year-wise NTSE papers with solutions.

Contents: *Preface* | *Acknowledgements* | Chemical Reactions and Equations | Mole Concept, Stoichiometry and Behaviour of Gases | Atomic Structure | Periodic Table and Periodic Properties | Chemical Bonding | Acids, Bases and Salts | Electrolysis and Electrochemistry | Metals and Non-metals | Carbon and its Compounds | Organic Chemistry | Chemical Kinetics and Chemical Equilibrium | Study of Compounds | *Appendices*

2023	436 pp.	Paperback
978-93-93330-25-3		₹ 675.00

Mathematics Foundation for Class X (NEW)

Nikhil Jaiswal

Steel City, Jharkhand, India

Mathematics Foundation for Class X has been prepared to help students enhance their mathematical skills and mental ability to help them ace their board examinations with ease. The book also enables them to transition seamlessly from regular class-related work to a more methodoriented scheme of practice that is so essential to prepare for engineering entrance examinations. Spread across 27 chapters, the book has both objective and subjective type questions and covers topics of both ICSE and CBSE curricula. It also elaborates on concepts that are often included in

Test Preparation / Competitive Examinations

Contents: *Preface* | *About the Author* | Number System | Polynomials | Pair of Linear Equations in Two Variables | Inequations | Quadratic Equation | Ratio and Proportion | Matrices | Sequence and Series | Similar Triangles | Tangent to a Circle | Constructions | Loci | Co-ordinate Geometry | Trigonometry | Applications of Trigonometry | Area Related to Circle | Surface Area and Volume | Statistics | Probability | Percentage | Profit and Loss | GST | Banking | Interest | Shares and Dividends | Work and Time | Mental Ability

2025	612 pp.	Paperback
978-81-954009-8-0		₹ 875.00

SAS Kirmani

Founder, Erose Educational Infotech Private Limited, New Delhi, India

D Universities P

Foundation

SAS Kirma

This is a well-made resource book in Physics for both CBSE and ICSE students, providing clear and logical explanation of the concepts backed by sound physical arguments. The book elaborates on practical applications of the theory covered in each chapter and is replete with a wide array of exercise questions that help students to understand the subject and ace the board exams effortlessly. The solutions to the problems are provided step by step with detailed explanations wherever necessary.

Contents: Force and Pressure | Friction | Light | Pollution of Air and Water | Some Natural Phenomena | Sound | Stars and the Solar System | Measurement

Lecturer in Mathematics, Mentors Eduserv, Bokaro





(Density) | Energy | Chemical Effect of Current | Heat Transfer | Electricity

2024	300 pp.	Paperback
978-93-93330-52-9		₹550.00

Physics Foundation for Class IX

• NEW

SAS Kirmani

Founder, Erose Educational Infotech Private Limited, New Delhi, India



This is a well-made resource book in Physics for both CBSE and ICSE students, providing clear and logical explanation of the concepts backed by sound physical arguments. The book elaborates on practical applications of the theory covered in each chapter and is replete with a wide array of exercise questions that help students to understand the subject and ace the board exams effortlessly. The solutions to the problems are provided step by step with detailed explanations wherever necessary.

Contents: Motion | Force and Laws of Motion | Work, Power and Energy | Gravitation | Sound | Electricity and Magnetism | Fluids

2024	244 рр.	Paperback
978-93-93330-51-2		₹ 465.00

Physics Foundation for Class X



SAS Kirmani

Founder, Erose Educational Infotech Private Limited, New Delhi, India

www.universitiespress.com



This is a well-made resource book in Physics for both CBSE and ICSE students, providing clear and logical explanation of the concepts backed by sound physical arguments. The book elaborates on practical applications of the theory covered in each chapter and is replete with a wide array of exercise questions that help students to understand the subject and ace the board exams effortlessly. The solutions to the problems are provided step by step with detailed explanations wherever necessary.

Contents: Electricity | Magnetic and Heating Effects of Current | Reflection of Light | Refraction of Light | Human Eye | Heat | Modern Physics

2024	256 pp.	Paperback
978-93-93330-53-6		₹495.00

Olympiads

Mathematical Olympiad Challenges (Second Edition)

Titu Andreescu

American Mathematics Competitions, University of Nebraska, Lincoln, USA

Räzvan Gelca

Texas Tech. University, Department of Mathematics and Statistics, Lubbock, USA

This is a rich collection of problems put together by two experienced and well-known professors of the US International Mathematical Olympiad Team. Hundreds of beautiful, challenging and instructive problems from algebra, geometry, trigonometry, combinatorics and number theory are clustered by topic into self-contained sections with solutions provided separately. All sections start with an essay discussing basic facts and one or two representative

www.universitiespress.com

examples. A list of carefully chosen problems follows. Additionally, historical insights and asides are presented to stimulate further inquiry. The emphasis throughout is on encouraging readers to move away from routine exercises and memorised algorithms toward creative solutions to openended problems.

2014	304 pp.	Paperback
978-87-3221-485-4		₹ 1,025.00

Mathematical Techniques for <u>NEW</u> Competitive Examinations

Soudeep Deb

Assistant Professor, Indian Institute of Management Bangalore, Bengaluru, India

Debangan Dey

Visiting Fellow, National Institute of Mental Health, Bethesda, Maryland, USA



This is a problem-based book aimed at highschool students interested in mathematical topics related to the ISI and CMI entrance tests as well as Mathematics Olympiads. This book will help students in designing a well-planned pathway to tackle complicated problems from topics such as number theory, combinatorics, algebra, calculus, Euclidean and coordinate geometry, probability and statistics. The problem-solving strategies and pointers described here will help students become confident in mathematics and pave the way to attaining success.

Salient features

- For students appearing for the ISI and CMI entrance exams as well as Mathematics Olympiads
- Key results at the beginning of every chapter, listing the important definitions, theorems, identities, algorithms, principles, functions and formulae

Test Preparation / Competitive Examinations

- Solved examples showcasing different applications of the key results
- Useful tips in the form of tricks and techniques that can be used to solve problems
- Chapter-end exercises comprising multiple choice questions with solutions and subjective questions with hints
- Solved questions from the 2019, 2020 and 2021 ISI B.Math, ISI B.Stat and CMI BSc Math question papers
- Android app with solutions to all chapter-end exercises, questions and solutions from ISI and CMI question papers from 2017 onwards, and questions and solutions from regional and national Olympiads from 2017 onwards

Contents: *Preface* | *Acknowledgements* | Number Theory | Combinatorics | Algebra | Calculus | Euclidean Geometry | Coordinate Geometry | Probability and Statistics | Miscellaneous | *Appendix: Previous Years' Subjective Questions and Solutions*

2023	360 pp.	Paperback
978-93-93330-10-9		₹ 625.00

Problems and Solutions: International Olympiads on Astronomy and Astrophysics

Aniket Sule

Academic Coordinator, Indian Astronomy Olympiad Programme; Regional Coordinator (Asia-Pacific), IOAA and Reader, Homi Bhabha Centre for Science Education, Tata Institute of Fundamental Research, Mumbai, India



The International Olympiads on Astronomy and Astrophysics (IOAA) are competitions where teams of high-school students from around the world compete in a series of tests and are awarded medals based on their performance. Started in 2007, more than 45 countries have participated in these olympiads. The competition comprises three rounds: theoretical problems, data analysis

problems and night sky observation tests. This book presents problems from all the eight IOAAs held thus far. The problems are categorised according to the concepts involved and also graded according to the difficulty level. Solutions to all the problems are provided. Additional notes help make the solutions self-explanatory.

Contents: Preface | Acknowledgments | Academic Committees of Previous IOAAs | President's Message | A Note about the Problems | Table of Constants | Celestial Mechanics | Celestial Coordinate Systems | Geometric Astronomy and Time | Optics and Detectors | Physics of Stars and Planets | Stellar Observations | Binaries and Variables | Galactic Astrophysics | Extragalactic Astrophysics | Night Sky Observation | Solutions | Appendix: Syllabus of IOAA

2015	304 pp.	Paperback
978-81-7371-980-6		₹ 975.00

MATHEMATICS

• NEW

Mathematical Techniques for Competitive Examinations

Soudeep Deb

Assistant Professor, Indian Institute of Management Bangalore, Bengaluru, India

Debangan Dey

Visiting Fellow, National Institute of Mental Health, Bethesda, Maryland, USA



This is a problem-based book aimed at highschool students interested in mathematical topics related to the ISI and CMI entrance tests as well as Mathematics Olympiads. This book will help students in designing a well-planned pathway to tackle complicated problems from topics such as number theory, combinatorics, algebra, calculus, Euclidean and coordinate geometry, probability and statistics. The problem-solving strategies and pointers described here will help students become confident in mathematics and pave the way to attaining success.

Salient features

- For students appearing for the ISI and CMI entrance exams as well as Mathematics Olympiads
- Key results at the beginning of every chapter, listing the important definitions, theorems, identities, algorithms, principles, functions and formulae
- Solved examples showcasing different applications of the key results
- Useful tips in the form of tricks and techniques that can be used to solve problems
- Chapter-end exercises comprising multiple choice questions with solutions and subjective questions with hints
- Solved questions from the 2019, 2020 and 2021 ISI B.Math, ISI B.Stat and CMI BSc Math question papers
- Android app with solutions to all chapter-end exercises, questions and solutions from ISI and CMI question papers from 2017 onwards, and questions and solutions from regional and national Olympiads from 2017 onwards

Contents: *Preface* | *Acknowledgements* | Number Theory | Combinatorics | Algebra | Calculus | Euclidean Geometry | Coordinate Geometry | Probability and Statistics | Miscellaneous | *Appendix: Previous Years' Subjective Questions and Solutions*

2023	360 pp.	Paperback
978-93-93330-10-9		₹ 625.00

Mathematical Circles (Russian Experience)

Dmitri Fomin, Sergey Genkin and llia Itenberg



It is a book produced by a remarkable cultural circumstance in the former Soviet Union which fostered the creation of groups of students, teachers, and mathematicians called "Mathematical Circles". The work is predicated on the idea that studying mathematics can generate the same enthusiasm as playing a team sport—without necessarily being competitive. This book is intended for both students and teachers who love mathematics and want to study its various branches beyond the limits of the school curriculum. It is also a book of mathematical recreations and, at the same time, a book containing vast theoretical and problem material in main areas of what authors consider to be "extracurricular mathematics".

1998	288 pp.	Paperback
978-81-7371-115-2		₹ 795.00

Mathematical Olympiad Challenges

(Second Edition)

Titu Andreescu

American Mathematics Competitions, University of Nebraska, Lincoln, USA

Räzvan Gelca

Texas Tech. University, Department of Mathematics and Statistics, Lubbock, USA

This is a rich collection of problems put together by two experienced and well-known professors of the US International Mathematical Olympiad Team. Hundreds of beautiful, challenging and instructive problems from algebra, geometry, trigonometry, combinatorics and number theory are clustered by topic into self-contained sections with solutions provided separately. All sections start with an essay discussing basic facts and one or two representative examples. A list of carefully chosen problems follows. Additionally, historical insights and asides are presented to stimulate further inquiry. The emphasis throughout is on encouraging readers to move away from routine exercises and memorised algorithms toward creative solutions to openended problems.

2014	304 pp.	Paperback
978-81-322-1485-4		₹1,025.00

Moscow Math Circle, A: Week-by-Week Problem Sets

Sergey Dorichenko

Moscow Schools 57 and 179, Moscow, Russia



Moscow has a rich tradition of successful math circles, to the extent that many other circles are modeled on them. This book presents materials used during the course of one year in a math circle organized by mathematics faculty at Moscow State University, and also used at the mathematics magnet school know as Moscow School Number 57.

Each problem set has a new topic, offering problems in a range of difficulty levels. This timetested pattern has proved its effectiveness in engaging all students and helping them master new material while building on earlier knowledge.

The introduction describes in detail how the math circles at Moscow State University are run. Dorichenko describes how the early sessions differ from later session, how to choose problems, and what sort of difficulties may arise when running a circle. The book also includes a selection of problems used in the competition known as the Mathematical Maze, a mathematical Circle, which is run in the Russian style.

2016	264 pp.	Paperback
978-81-7371-993-6		₹695.00

OTHER EXAMINATIONS

Compendium of Objective Questions in Civil Engineering, A

C Venkatramaiah

Formerly Professor of Civil Engineering, S V University College of Engineering, Tirupati, India

¹⁸ Test Preparation / Competitive Examinations

www.universitiespress.com

A Krishna Sharma

Principal, Brindavan College of Engineering, Bengaluru, India



This book has been designed to meet the needs of students preparing for all kinds of competitive examinations and entrance tests for admission to postgraduate courses and job recruitment. About 4000 objective-type questions of different kinds, especially the multiple choice variety, from the different areas of civil engineering are included. Important definitions and essential formulae including code provisions, where applicable, are given. The accent is on quality rather than on quantity.

Contents: Foreword | Preface | Acknowledgements | Note Regarding Chapters 17 to 19 | Engineering Mechanics | Strength of Materials and Elements of Structural Analysis | Advanced Structural Analysis | Concrete Technology | Design of RCC Structures | Design of Steel Structures | Geotechnical Engineering | Transportation Engineering | Surveying | Engineering Materials | Building Construction | Estimating, Costing and Valuation | Construction Management | Water Supply Engineering | Sewerage and Sewage Treatment | Environmental Sanitation | Mechanics of Fluids | Hydraulic Machinery | Hydrology and Irrigation Engineering

2014	496 pp.	Paperback
978-81-7371-933-2		₹ 1,175.00

Computer Aptitude for Competitive ONEW

Reema Thareja

Assistant Professor, Department of Computer Science, Shyama Prasad Mukherji College, University of Delhi, India



This book is designed to help students appearing for competitive exams such as those conducted by Banking, SSC, Railways, Police and various other selection boards at the national and state levels. It is also a handy guide to prepare for campus recruitment interviews that focus on general computer awareness. The book comprises 12 chapters and has 9 solved papers. It contains more than 2100 MCQs and True or False questions in computer science covering a wide range of topics from the basic input–output systems to the advanced concepts of IoT, Big Data, AI and data warehousing. Illustrative diagrams, keywords and topic highlights amply support the discussion of each new topic for the reader's benefit.

Contents: Introduction to Computer | GUI-based Operating Systems | Data Organization and Database Management System | Internet, WWW and Web Browsers | Communication and Collaboration | Application of Digital Financial Services | IT and Its Application in Business | Data Security and Encryption | Elements of Word Processing | Spreadsheet | Microsoft PowerPoint | Microsoft Access | Solved Papers 1–9 | MCQ Sets 1–4

2023	200 pp.	Paperback
978-93-89211-94-8		₹550.00

(NEW)

NTA CUET (UG): English and General Test

SAS Kirmani

Founder and Chairman, Erose Educational Infotech Private Limited, New Delhi, India

Kumar Supravin

Haryana Water Resources Authority, New Delhi, India

Abdul Hameed PA

Assistant Professor in English, Zakir Husain Delhi College, University of Delhi, New Delhi, India

www.universitiespress.com



NTA CUET (UG) is a comprehensive guide designed to aid students in their preparation for the National Testing Agency's (NTA) examinations, including those for admission to central universities and other esteemed institutions. This book has been meticulously crafted in such a way as to be accessible to students from all backgrounds, with information presented in a clear, engaging style. The content has been carefully prepared, taking into account the latest syllabus and insights from successful candidates. It is supplemented with relevant examples and ample exercises to help students review and revise all the concepts studied during their school years.

Salient features

- Designed according to the latest syllabus and exam pattern
- Covers topics relating to Numerical Ability and Quantitative Reasoning, Logical and Analytical Reasoning, General Knowledge/Awareness and Current Affairs and General English/ Comprehension
- Over 250 solved examples
- More than 4200 exercise questions with answers and hints/solutions to critical questions
- Android app with additional multiple choice questions on Current Affairs (updated frequently) and practice tests

Contents: About the Authors | Endorsements | Preface and Acknowledgements | Unit I: Numerical Ability and Quantitative Reasoning | The Number System | Divisibility | LCM and GCF | Fractions and Decimals | Ratio and Proportion | Alligation | Geometry | Mensuration | Algebra | Percentage | Profit and Loss | Simple and Compound Interest |

Test Preparation / Competitive Examinations

Time and Work | Pipes and Cisterns | Average Statistics and Data Analysis | Counting Techniques and Mathematics of Chance | Time and Distance, Trains, Streams | Unit II: Logical and Analytical Reasoning Visual Reasoning | Mirror Image and Water Image | Counting | Geometrical Figures | Cubes and Dice | Direction Sense | Venn Diagrams | Syllogism | Analogy | Coding and Decoding | Series | Ranking | Family Relationships | Seating Arrangements | Odd Man Out | Alphabet and Sequence of Words | Miscellaneous | Unit III: General Knowledge/ Awareness and Current Affairs | The Indian Constitution | Citizenship, Fundamental Rights and Directive Principles | The Government | The Judiciary | The United Nations | Ancient India | Medieval India | Modern India | World Geography | Know India | Indian Geography | Mechanics | Heat | Sound | Light | Electricity and Magnetism | The Stars and the Solar System | General and Physical Chemistry | Inorganic and Organic Chemistry | Pollution | Cells and Tissues | Life Processes | Diversity in Living Organisms | Heredity and Evolution | Miscellaneous Topics | Current Affairs | Unit IV: General English and Comprehension | Introduction | Syllabus Overview | Reading Comprehension | Verbal Ability | Grammar and Language Proficiency | Vocabulary | Synonyms and Antonyms | Idioms and Literary Devices | Foreign Words in the English Language | Writing Skills

2024	812 pp.	Paperback
978-93-93330-68-0		₹ 995.00

Problems and Solutions: Physical Chemistry

C Kalidas

Formerly Professor, Department of Chemistry, IIT Madras and Emeritus Scientist (CSIR), IIT Madras, Chennai, India

M V Sangaranarayanan

Dr S R Rajagopalan Institute Chair Professor at the Department of Chemistry, IIT Madras, Chennai, India



This book presents an extensive collection of diverse types of worked out examples, practice problems and multiple choice questions. The aim is to gain adequate expertise in solving a variety of numerical, conceptual and descriptive questions. The level of questions ranges from the fundamental to the advanced, with the hope that the book will be found useful by a wide spectrum of students at all levels. The book is primarily intended as a companion to textbooks in physical chemistry. The incorporation of different types of multiple choice questions will aid the student to comprehend the subtle aspects of each topic.

Salient features

20

- Covers all the main topics of physical chemistry at the undergraduate and post-graduate levels
- Includes essential theoretical aspects required for problem solving

- Provides 544 worked out problems, 351 practice problems with solutions, 508 multiple choice questions with answers
- Covers the CBCS UGC syllabus; authored by eminent professors from IIT
- Aids preparation for competitive examinations such as CSIR–UGC NET, GATE and JAM
- Includes solved question papers of CSIR–UGC NET, GATE and JAM
- Provides access to an App for revision on your Android mobile phone.

Contents: Preface | Fundamental Constants | Gaseous State | Thermodynamics | Electrochemistry | Chemical Kinetics | Liquid State | Surface Chemistry, Catalysis and Colloids | Solid State | Photochemistry | Solutions | Phase Rule and Phase Equilibrium | Polymer Chemistry | Quantum Chemistry | Acid– Base and Other Ionic Equilibria, Buffers and Buffer Action, Indicators | Nuclear Chemistry | Applications of Statistical Thermodynamics | Miscellaneous Problems | Bibliography | Appendix 1: CSIR–UGC NET JRF/SET Solved Question Paper | Appendix 2: GATE Solved Question Paper | Appendix 3: JAM Solved Question Paper | Index

2020	424 pp.	Paperback
978-93-89211-18-4		₹ 950.00

Author Index

Abdul Hameed, PA 18 Agrawal, Rohit 3 Ali, Sheikh Ashfaque 8,9 Andreescu, Titu 14, 17 Awasthi, Archana 10 Choudhary, Shubh Karan 3 Datta, Abhinav 9 Deb, Soudeep 15, 16 Dey, Debangan 15, 16 Dorichenko, Sergey 17 Fomin, Dmitri 16 Gelca, Räzvan 14, 17 Genkin, Sergey 16 Govil, Nishu Kumar 6, 7 Gupta, Saurabh 10 Itenberg, llia 16 Jaiswal, Nikhil 13

Jha, Abhimanyu Kumar 1, 9, 10 Jha, Meenakshi 1 Ioshi, K D 6 Kalidas, C 19 Kirmani, SAS 5, 6, 7, 13, 14, 18 Mathur, Runjhun 1 Sangaranarayanan, M V 19 Sharan, Mahek 9, 10 Sharma, A Krishna 18 Sidana, M P 2, 3 Singh, Pratyush Kumar 7, 8 Singhal, Atul 11, 12 Sule, Aniket 15 Supravin, Kumar 6, 7, 18 Thareja, Reema 18 Velramar, Balasubramanian 10 Venkatramaiah, C 17

TITLE INDEX

Biology for NEET, Volume 1 (Second Edition) 1 Biology for NEET, Volume 2 (Second Edition) 1 Biology Foundation for Class IX 10 Biology Foundation for Class VIII 9 Biology Foundation for Class X 10 Chemistry for NEET, Volume 1 2 Chemistry for NEET, Volume 2 3 Chemistry Foundation for Class IX 12 Chemistry Foundation for Class VIII 11 Chemistry Foundation for Class X 12 Compendium of Objective Questions in Civil Engineering, A 17 Computer Aptitude for Competitive Examinations 18 Educative JEE (Third Edition) 6 Fundamental Problems in Organic Chemistry for NEET 3 Mathematical Circles (Russian Experience) 16 Mathematical Olympiad Challenges (Second Edition) 14, 17 Mathematical Techniques for Competitive Examinations 15, 16

Mathematics for JEE, Volume 1 6 Mathematics for IEE, Volume 2 7 Mathematics Foundation for Class X 13 Moscow Math Circle, A: Week-by-Week Problem Sets 17 NTA CUET (UG): English and General Test 18 Objective Biology for NEET, Volume 1 4 Objective Biology for NEET, Volume 2 4 Objective Questions in Mathematics for JEE Main and Advanced 7 Objective Questions in Physics for JEE Main and Advanced 8 Physics for JEE Main, Volume 1 8 Physics for JEE Main, Volume 2 9 Physics for NEET, Volume 1 5 Physics for NEET, Volume 2 5 Physics Foundation for Class IX 14 Physics Foundation for Class VIII 13 Physics Foundation for Class X 14 Problems and Solutions: International Olympiads on Astronomy and Astrophysics 15 Problems and Solutions: Physical Chemistry 19

Register with Us		
At Universities Press, we believe in sharing details pertaining to our books and the events that we conduct. Should you wish to receive such information by email or by post on a regular basis, you may please write to marketing@universitiespress.com and confirm:		
Name and address for correspondence:		
Email address:		
STD code: Landline: Mobile:		
Subject areas of interest:		
Please tick the relevant box and confirm the mode by which you would like to receive information from us. By Email: By Post: Both:		
We will be happy to register your details with our database and shall stay in touch.		

Prices updated on 20-01-2025. These prices are subject to change without notice.