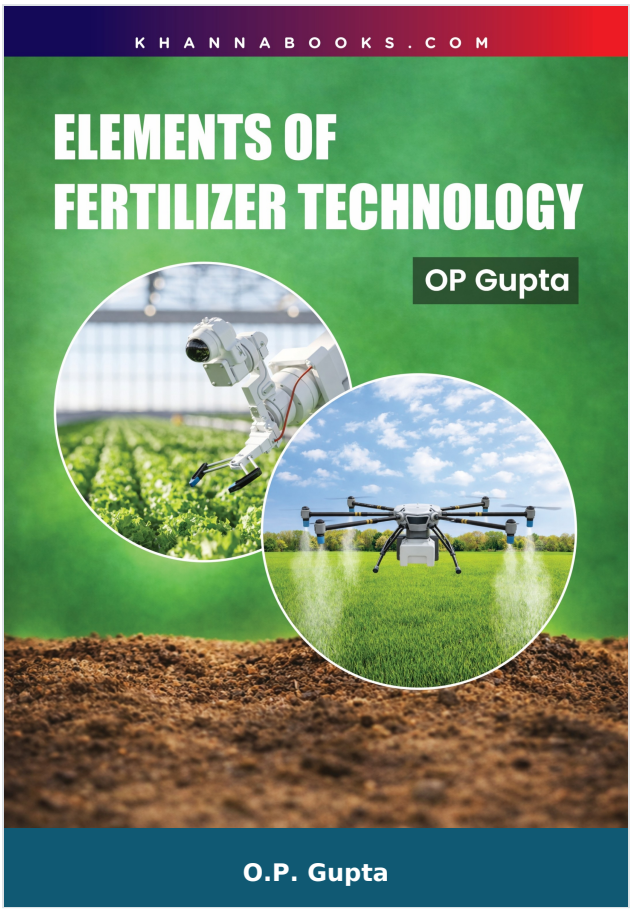


Elements of Fertilizer Technology

Author :	O.P. Gupta
ISBN 13 :	978-93-74549-87-2
ISBN 10 :	9374549875
E-ISBN 13 :	978-93-74549-87-2
Edition :	First
Pages :	278
Type of book :	Physical
Year :	2026
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 460.00
Categories :	Chemical Engineering, New Arrivals, Book Store
Condition Type :	New
Country Origin :	India

Khanna Publishing House

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

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

Product Description

Elements of Fertilizer Technology

Authored by chemical engineer Om Prakash Gupta, this book is a comprehensive guide covering the entire fertilizer industry-from soil science to advanced manufacturing. it details the production of key fertilizers like Urea, Nitric Acid, and NPK blends, while addressing environmental challenges like pollution control. Designed for clarity, it is an essential resource for chemical engineering students, faculty, and industry professionals, combining theoretical knowledge with practical tools like objective-type questions.

Salient Features

- **Comprehensive Nutrient Analysis**: The book provides an in-depth exploration of primary, secondary, and micronutrients, detailing their specific roles in plant metabolism, growth, and disease resistance
- **Industrial Manufacturing Processes**: It offers technical insights into the production of nitrogenous, phosphatic, and potassic fertilizers, including detailed sections on ammonia synthesis and sulfuric acid manufacture
- **Complex NPK Formulation**: Readers gain a clear understanding of compound and complex fertilizers, including the chemistry behind NPK grades and various granulation techniques used in industrial production.
- **Environmental Stewardship**: A dedicated section focuses on environmental pollution control, covering air emission prevention, wastewater treatment, and the management of hazardous byproducts like fluorides and phosphogypsum.
- **Practical Application Strategies**: The text describes diverse fertilizer application methods-such as broadcasting. placement, and foliar treatment to help maximize nutrient use efficiency and minimize environmental runoff.

Khanna Publishing House
4C/4344, Ansari Road, Daryaganj, New Delhi-110002
Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

- **Sustainable Organic Perspectives**: Beyond synthetic chemicals, the book discusses organic manures and bio-fertilizers, highlighting their role in building soil organic matter and improving long-term soil fertility.
- **Assessment and Exam Prep**: To aid student learning. the book includes over 303 chapters cha of content supplemented by numerous objective and short-answer questions designed for competitive exam preparation.
- **Technical Glossary and References**: A robust glossary of industry terms and a factsheet on fertilizer application provide quick-reference value for both students and practicing engineers.

Khanna Publishing House
4C/4344, Ansari Road, Daryaganj, New Delhi-110002
Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Table Of Contents

- Preface
- SECTION A
- : GENERAL TOPICS
- SECTION B
- : NITROGENOUS FERTILISER
- SECTION C
- : PHOSPHATE FERTILISER
- SECTION D
- : POTASSIC FERTILISER
- SECTION E
- : COMPOUND/COMPLEX/ NPK FERTILISER
- SECTION F
- : APPENDICES

Author

O.P. Gupta

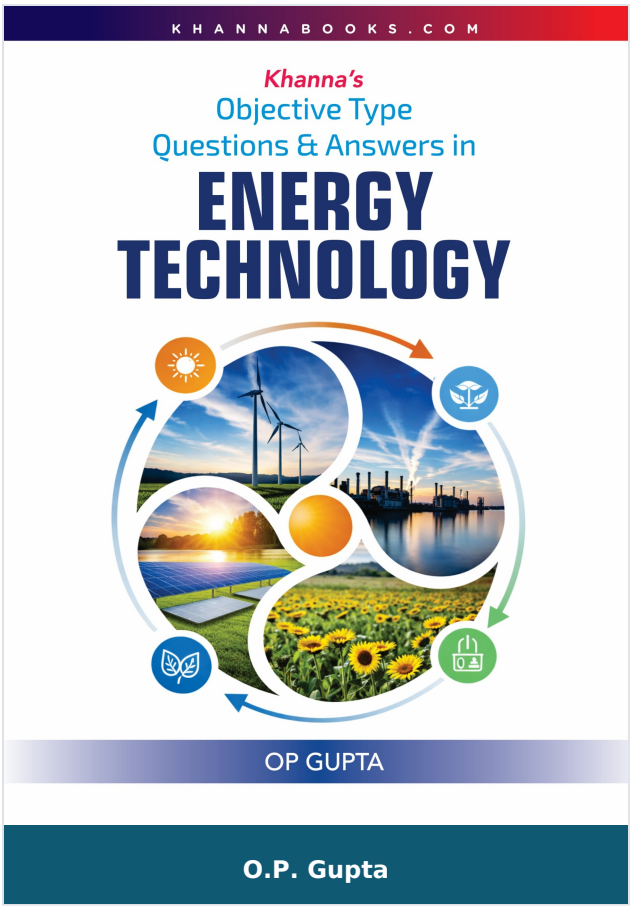
O.P. Gupta Om Prakash Gupta is basically being a chemical engineer, he has a practising experience of efficient Ennergy management and HR functions in steel Industry for more than three decades. privileged to be the youngest writer of technical books in the country (for he had written his first book at the age of 24 years while doing M. Tech. at I.I.T kanpur in 1979), he has authored many frontline books for engineering students. besides, being the regular faculty member in technical courses for Management Trainees (Technical), he has also visited england and france on a study tour sponsored by United Nations Development Programme (UNDP) to study the scope of energy conservation in

steel plants in 1987.

Khanna Publishing House

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

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



Khanna's Objective Type Questions & Answers in Energy Technology

Author :	O.P. Gupta
ISBN 13 :	978-93-74545-06-5
ISBN 10 :	9374545063
E-ISBN 13 :	978-93-74545-06-5
Edition :	First
Pages :	572
Type of book :	Physical
Year :	2026
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 698.00
Categories :	OBJECTIVE TYPE BOOKS, New Arrivals, Environmental Engineering, Book Store
Condition Type :	New
Country Origin :	India

Khanna Publishing House
4C/4344, Ansari Road, Daryaganj, New Delhi-110002
Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Product Description

Objective Type Questions and Answers in Energy Technology is a comprehensive academic resource designed to bridge the gap between theoretical knowledge and practical application in the field of energy. Authored by Om Prakash Gupta, a veteran professional with extensive experience at the Bokaro Steel Plant, the book serves as an essential guide for mastering the complexities of energy systems, fuels, and conservation. Its core theme revolves around providing a structured approach to understanding both conventional and renewable energy technologies through a vast collection of multiple-choice and short-answer questions.

The book's primary purpose is to assist students and professionals in preparing for high-stakes examinations, covering a diverse array of topics from thermal power generation and industrial boilers to cutting-edge renewable sources like solar, wind, and nuclear fusion. It is specifically tailored for diploma, degree, and postgraduate engineering students, as well as candidates appearing for professional membership examinations such as AMIE, AMIIM, and AMIICHE. Additionally, it serves as a valuable reference for aspiring Energy Managers and Auditors preparing for Bureau of Energy Efficiency (BEE) certifications. With its clear explanations and wide-reaching scope, this book offers immense practical value for anyone looking to excel in the energy sector.

Salient Features

• Exhaustive Topic Coverage: The book spans 33 comprehensive chapters, covering everything from basic energy scenarios and combustion technology to advanced topics like Magneto Hydro Dynamic (MHD) generators.

• Dual-Section Format: The content is strategically divided into Section A, featuring extensive objective-type questions for rapid self-assessment, and Section B, providing detailed short-answer responses.

Khanna Publishing House

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

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

• Professional Exam Alignment: Content is specifically curated to meet the syllabi requirements of competitive engineering exams and professional certifications like the BEE Energy Auditor examination.

• Renewable Energy Focus: Detailed sections are dedicated to the latest developments in solar, wind, ocean, geothermal, and biomass energy, reflecting modern shifts toward sustainability.

• Industrial Utility Insights: Includes practical knowledge on industrial components such as furnaces, refractories, compressed air systems, and cooling towers, essential for field professionals.

• Energy Audit Emphasis: Provides specialized questions on energy conservation and auditing, helping readers understand the regulatory and practical frameworks of energy management.

• Practical Problem Solving: Features worked-out calculations for critical metrics like specific energy consumption and boiler efficiency to enhance quantitative skills.

• Environmental Impact Integration: Addresses the critical relationship between energy use and the environment, including topics on global warming, greenhouse gases, and emission trading.

Khanna Publishing House

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

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

Table Of Contents

- Section-A
- Basics of Energy and Energy Scenario
- Fuels and Combustion Technology
- Furnaces
- Boilers
- Waste heat Recovery
- Properties & Uses of Steam
- Thermal Insulation
- Refractories
- Basics of Electric Energy Uses
- Electric Transformers
- Electric Motors
- Fans and Blowers
- Pumps and Pumping Systems
- Cooling Towers
- Compressed Air System
- Refrigeration System
- DG Set System
- Energy Efficient Lighting System
- Energy Efficient Technology In Electrical System
- Renewable Sources of Energy
- Solar Energy
- Wind Energy

Khanna Publishing House

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

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

- Ocean Energy
- Geothermal Energy
- Biomass Energy
- Hydropower
- Nuclear Fusion Energy
- Magneto Hydro dynamic (MHD) Generator
- Energy Storage & Conversion System
- Electric Power Generation
- Energy Conversation & Audit
- Energy & Environmental Impact
- Miscellaneous Question
- Section- B
- Short Answer Type Question

Author

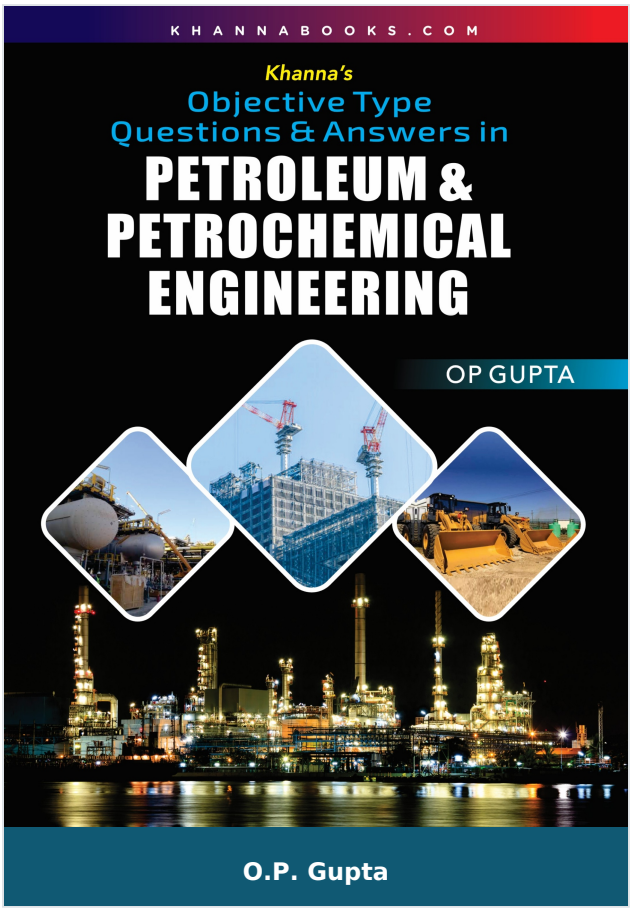
O.P. Gupta

O.P. Gupta Om Prakash Gupta is basically being a chemical engineer, he has a practising experience of efficient Ennergy management and HR functions in steel Industry for more than three decades. privileged to be the youngest writer of technical books in the country (for he had written his first book at the age of 24 years while doing M. Tech. at I.I.T kanpur in 1979), he has authored many frontline books for engineering students. besides, being the regular faculty member in technical courses for Management Trainees (Technical), he has also visited england and france on a study tour sponsored by United Nations Development Programme (UNDP) to study the scope of energy conservation in steel plants in 1987.

Khanna Publishing House

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

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



Khanna's Objective Type Questions & Answers in Petroleum & Petrochemical Engineering

Author :	O.P. Gupta
ISBN 13 :	978-93-74543-20-7
ISBN 10 :	9374543206
E-ISBN 13 :	978-93-74543-20-7
Edition :	First
Pages :	256
Type of book :	Physical
Year :	2026
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 398.00
Categories :	Chemical Engineering, OBJECTIVE TYPE BOOKS, New Arrivals, Book Store
Condition Type :	New
Country Origin :	India

Khanna Publishing House
4C/4344, Ansari Road, Daryaganj, New Delhi-110002
Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Product Description

Objective Type Questions and Answers in Petroleum & Petrochemical Engineering is a comprehensive academic resource designed to provide a deep and structured understanding of the oil and gas industry. Authored by Om Prakash Gupta, a seasoned expert with extensive industrial experience at Bokaro Steel Plant, this book serves as an essential guide for mastering the technical nuances of petroleum refining and petrochemical manufacturing. Its core theme revolves around bridging the gap between theoretical engineering principles and their practical applications in the energy sector.

The book is meticulously divided into two primary sections: Petroleum Engineering and Petrochemical Engineering. Each part features a rich repository of objective-type questions, detailed short-answer explanations, and a specialized glossary of terms to ensure a holistic learning experience. By covering critical topics such as crude oil properties, refining processes like cracking and reforming, and the synthesis of polymers and elastomers, the text provides the practical value needed to excel in both academic and professional environments.

Salient Features

• Dual-Domain Coverage: The text provides a balanced and exhaustive exploration of both Petroleum and Petrochemical Engineering, ensuring students gain expertise in the entire hydrocarbon value chain.

• Examination-Oriented Design: Prepared in strict accordance with the latest academic and professional syllabi, making it a perfect companion for AMIE, AMIICHE, and university-level competitive exams.

• Extensive Question Bank: Includes a vast collection of objective-type questions with detailed answers, designed to test and reinforce the reader's grasp of fundamental and advanced engineering concepts.

Khanna Publishing House

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

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

• Detailed Conceptual Explanations: Features structured short-answer questions that delve into the "why" and "how" behind industrial processes, such as catalytic hydrotreating and solvent dewaxing.

• Comprehensive Technical Glossaries: Each section concludes with a dedicated glossary of related terms, providing quick-reference definitions for essential industry terminology and jargon.

• Focus on Modern Refining: Covers cutting-edge industrial processes including catalytic reforming, alkylation, and the production of specialized fuels like Aviation Turbine Fuel (ATF).

• Industrial Process Insights: Provides practical knowledge on refinery operations, from the detection of petroleum deposits to the final blending of hydrocarbons and chemical additives.

• Polymer Science Integration: Explores the petrochemical sector's role in creating essential materials, including plastics, rubbers, and synthetic fibers, highlighting their real-world manufacturing routes

Khanna Publishing House

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

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

Table Of Contents

- Part-I : Petroleum Engineering
- A. Objective Type Questions and Answers in Petroleum Engineering
- B. Short Answer Type Questions in Petroleum Engineering
- C. Miscellaneous Questions in petroleum Engineering
- D. Glossary of Petroleum Engineering
- Part-II: Petrochemical Engineering
- A. Objective Type Questions Answers in Petrochemical Engineering
- B. Short Answer Type Questions in Petrochemical Engineering
- C. Glossary Of Petrochemical Engineering

Author

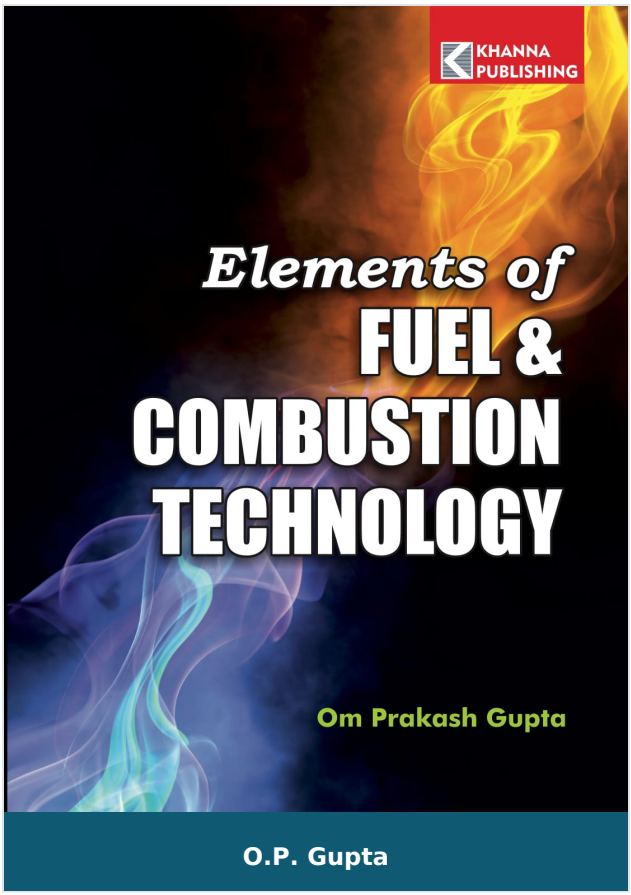
O.P. Gupta

O.P. Gupta Om Prakash Gupta is basically being a chemical engineer, he has a practising experience of efficient Ennergy management and HR functions in steel Industry for more than three decades. privileged to be the youngest writer of technical books in the country (for he had written his first book at the age of 24 years while doing M. Tech. at I.I.T kanpur in 1979), he has authored many frontline books for engineering students. besides, being the regular faculty member in technical courses for Management Trainees (Technical), he has also visited england and france on a study tour sponsored by United Nations Development Programme (UNDP) to study the scope of energy conservation in steel plants in 1987.

Khanna Publishing House

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

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



Elements of Fuel & Combustion Technology

Author :	O.P. Gupta
ISBN 13 :	978-93-86173-32-4
ISBN 10 :	9386173328
E-ISBN 13 :	978-93-86173-32-4
Edition :	First
Pages :	1168
Type of book :	Physical
Year :	2018
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 499.00
Categories :	Chemical Engineering, Book Store
Condition Type :	New
Country Origin :	India

Khanna Publishing House

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

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

Product Description

This book contains detailed description of solid, liquid, gaseous fuels, combustion and furnaces. Beside short questions and answers and multiple choice questions & answers and multiple choice questions; answers drawn from the examination papers of various engineering Colleges and professional bodies examinations are also included.

The book will be useful for degree & diploma curriculum of various branches of Engineering and for various associate membership examinations conducted by professional bodies like Institution of Engineers (AMIE), Indian Institute of Metals(AMIIM), Indian Institute of Chemical Engineers(AMIICHE), Institute of Chemicals etc.

Khanna Publishing House

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

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

Table Of Contents

- Introduction and Classification of Fuels
- Definitions & units Conversions Related to Fuel Technology
- Wood, Charcoal and Peat
- Origin, Composition, Characteristics, and Significance of Constitution of Coal
- Petrography of Coal
- Washing of Coal
- The Storage of Coal-Oxidation & Spontaneous Combustion
- Pulverised Fuel/Coal
- Usage of Coal
- Comparative Study of Solid, Liquid and Gaseous Fuel
- Selection of Coal for Various Uses
- Mineral Matters in Coal-Ash and Clinker Formation
- Properties and Testing of Coal
- Classification of Coal
- Carbonisation of Coal-Coke Making and By-Products Recovery
- Characteristics and Distribution of Indian Coal
- Origin, Composition, & Classification of Petroleum-Indian Crude Oil
- Crude of Distillation
- Thermal and Catalytic Cracking
- Thermal and Catalytic Reforming
- Polymerisation, Alkylation and Isomerisation
- Purification of Petroleum Products
- Properties of Petroleum Products

Khanna Publishing House

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

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

- Coal Tar Fuels (C.T.F)
- Requisite of Good Quality Gasoline,Diesel, Fuel Oil and Other Petroleum Products
- Liquid Fuels from Coal by its Hydrogenation and Liquefaction
- Other Liquid Fuels-Benzole, Shale Oil, Alcohol and Colloidal Fuels
- Storage and Handling of Liquid Fuels/Fuel Oils
- Methane, Wood Gas, Gobar Gas,Sewage Gas and Gas from Underground Gasification of Coal
- Natural Gas, Liquified Petroleum Gas(LPG) and Refinery Gases
- Producer Gas and Water Gas
- Blast Furnace Gas, Coke Oven Gas and L.D Converter Gas-Steel Plant Fuels
- Coal Gas from Coal Gasification Processes
- Oil Gas from Oil Gasification Processes
- General Principles of Combustion
- Types of Combustion Processes
- Combustion of Solid Fuels Grate Firing and Pulverised Fuel Firing System
- Burners for Liquid and Gaseous Fuels Combustion
- Combustion Calculations
- Gas Analysis & Calorific Value Determination
- Fluidised Bed Combustion
- Introduction of Furnaces
- Waste Heat Recovery and Fuel Economy in Furnaces
- Control of Furnace Atmosphere
- Classification of Furnaces
- Fuels & Furnaces in Steel Plants
- Furnace Heat Balance Calculations
- Briquetting of Solid Fuels/Coal

Khanna Publishing House

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

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

- Gas Cleaning and Purification
- Rocket Fuels
- Thermal Insulation
- Properties and Efficient Utilization of Steam
- Electric Furnaces
- Refractories
- Appendix-A: Technical Data on Fuels
- Appendix-B: Short Questions and Answers on Fuel Technology
- Appendix-C: Multi-Choice Questions and Answers Fuel and Combustion Technology
- Appendix-D:Glossary of terms related to Fuels and Combustion Technology

Author

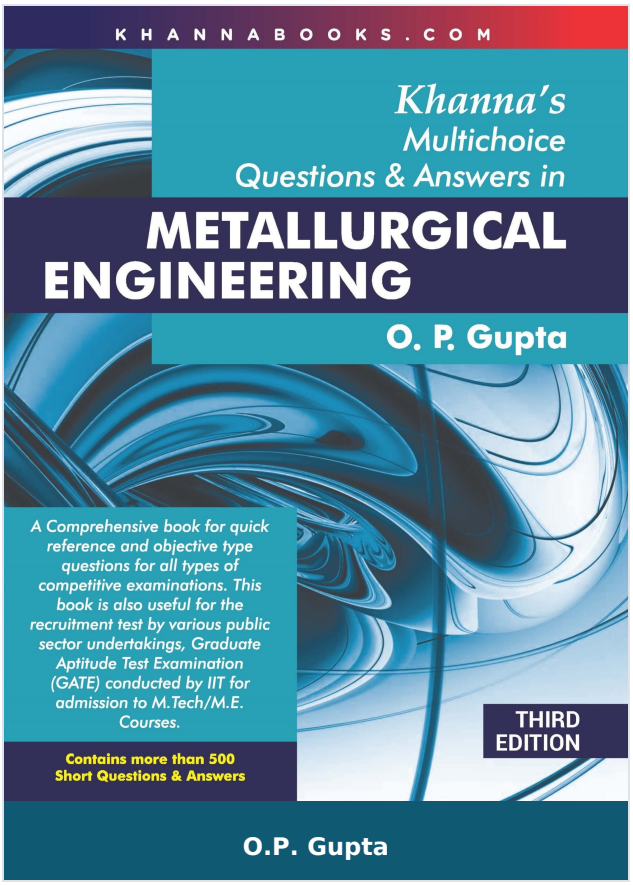
O.P. Gupta

O.P. Gupta Om Prakash Gupta is basically being a chemical engineer, he has a practising experience of efficient Ennergy management and HR functions in steel Industry for more than three decades. privileged to be the youngest writer of technical books in the country (for he had written his first book at the age of 24 years while doing M. Tech. at I.I.T kanpur in 1979), he has authored many frontline books for engineering students. besides, being the regular faculty member in technical courses for Management Trainees (Technical), he has also visited england and france on a study tour sponsored by United Nations Development Programme (UNDP) to study the scope of energy conservation in steel plants in 1987.

Khanna Publishing House

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

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



Khanna's Multichoice Questions & Answers in Metallurgical Engineering

Author :	O.P. Gupta
ISBN 13 :	978-93-86173-11-9
ISBN 10 :	9386173115
E-ISBN 13 :	978-93-86173-11-9
Edition :	3
Pages :	1122
Type of book :	Physical
Year :	2023
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 499.00
Categories :	OBJECTIVE TYPE BOOKS, Metallurgical Engineering, Book Store
Condition Type :	New
Country Origin :	India

Khanna Publishing House
4C/4344, Ansari Road, Daryaganj, New Delhi-110002
Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Product Description

This book is meant for diploma & degree student of metallurgical engineering for their academic programs as well as for various competitive examination for securing jobs. This book has been structured in three section. First section contains multiple choice type questions of various subjects of metallurgical engineering. Second section contains chapter wise question of GATE (Graduate Aptitude Test in Engineering) from 1991 to 2016. Third section contains SHORT QUESTIONS & ANSWERS in METALLURGICAL ENGINEERING. Fourth section contains APPENDICES containing Glossary of terms related to Metallurgical Engineering and Q&A of GATE-2017. This book has been designed to serve as "Hand Book of Metallurgical Engineering" which will be useful for various competitive examinations for recruitment in various public sector & Private Sector companies as well as for GATE Examination. Question have been arranged subject wise and answers are given at the bottom of the page.

Khanna Publishing House

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

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

Table Of Contents

- Section A – MCQ of Metallurgical Engineering
- General Metallurgy
- Mineral Dressing
- Iron Making
- Steel Making
- Extractive Metallurgy (Non-Ferrous)
- Mechanical Metallurgy
- Physical Metallurgy
- Materials Science
- Fuel Technology
- Furnace Technology
- Refractory Technology
- Foundry Metallurgy
- Welding Metallurgy
- Metallurgy of Nuclear Metals
- Electrometallurgy and Corrosion
- Metallurgical Testing &Inspection
- Metallurgical Analysis
- Physics of Metals
- Metallurgical Thermodynamics
- Metallurgical Kinetics
- Miscellaneous Questions
- Section B – MCQ of GATE (Graduate Aptitude Test in Engineering)

Khanna Publishing House

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

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

- General Metallurgy
- Mineral Dressing
- Iron Making
- Steel Making
- Extractive Metallurgy (Non-Ferrous)
- Mechanical Metallurgy
- Physical Metallurgy
- Materials Science
- Fuel Technology
- Refractory Technology
- Foundry Metallurgy
- Welding Metallurgy
- Electrometallurgy and Corrosion
- Metallurgical Thermodynamics
- Metallurgical Kinetics
- Miscellaneous Questions
- GATE– 2017
- Section- C Short Questions & Answers in Metallurgical Engineering
- Glossary

Author

O.P. Gupta

O.P. Gupta Om Prakash Gupta is basically being a chemical engineer, he has a practising experience of efficient Ennergy management and HR functions in steel Industry for more than three decades. privileged to be the youngest writer of technical books in the country (for he had written his first book at the age of 24 years while doing M. Tech. at I.I.T

Khanna Publishing House

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

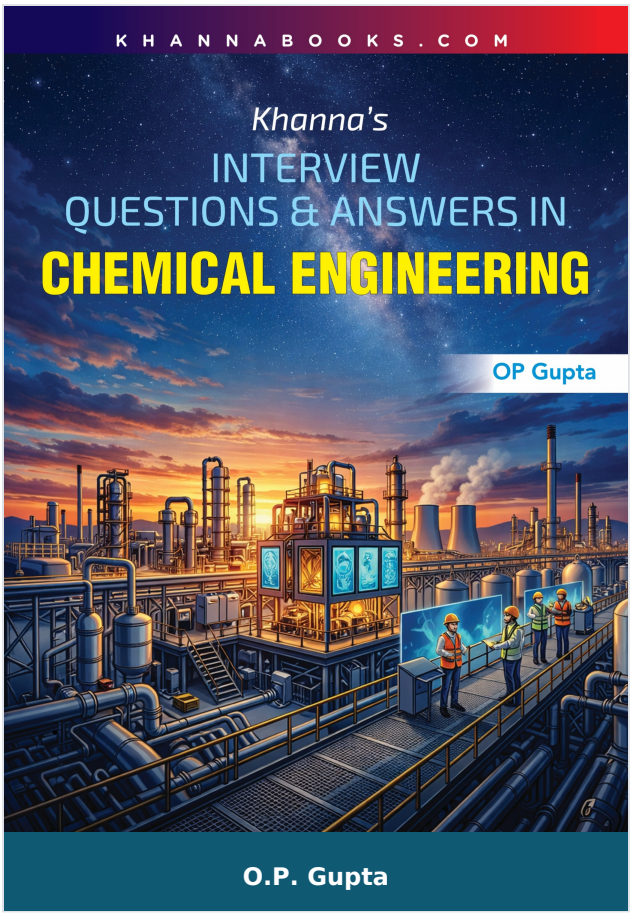
Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

kanpur in 1979), he has authored many frontline books for engineering students. besides, being the regular faculty member in technical courses for Management Trainees (Technical), he has also visited england and france on a study tour sponsored by United Nations Development Programme (UNDP) to study the scope of energy conservation in steel plants in 1987.

Khanna Publishing House

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

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



Khanna's Interview Questions & Answers in Chemical Engineering

Author :	O.P. Gupta
ISBN 13 :	978-93-77082-49-9
ISBN 10 :	9377082498
E-ISBN 13 :	978-93-77082-49-9
Edition :	First
Pages :	240
Type of book :	Physical
Year :	2026
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 498.00
Categories :	Chemical Engineering, OBJECTIVE TYPE BOOKS, New Arrivals, Book Store
Condition Type :	New
Country Origin :	India

Khanna Publishing House
4C/4344, Ansari Road, Daryaganj, New Delhi-110002
Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Product Description

Interview Questions and Answers in Chemical Engineering by O.P. Gupta is a comprehensive, meticulously structured resource designed to bridge the gap between academic learning and professional recruitment. This first-edition volume provides a deep dive into the core pillars of the field, covering essential topics such as Fluid Mechanics, Heat Transfer, Mass Transfer, and Instrumentation. By presenting technical concepts in a clear question-and-answer format, the book helps readers master complex theories while simultaneously preparing them for the practical rigors of the industry.

The book is tailored for a wide-ranging audience, including diploma, degree (B. Tech.), and postgraduate (M. Tech.) students, as well as PhD candidates defending their theses. It also serves as an indispensable guide for professionals preparing for associate membership examinations like AMIE and AMIIChE, and for those appearing for recruitment interviews at premier public and private sector organizations like BARC, SAIL, and IOC. With its focus on both foundational principles and real-world applications—ranging from valve operations to advanced membrane separations—this book acts as a vital tool for anyone looking to excel in the chemical engineering profession.

Salient Features

• Core Technical Mastery: Comprehensive coverage of fundamental subjects like fluid mechanics, heat transfer, and thermodynamics.

• Interview-Ready Format: Concepts presented in a concise question-and-answer style, ideal for viva-voce and recruitment preparation.

• Industrial Equipment Insights: Functional details on hardware like orifice meters, venturi scrubbers, and various heat exchangers.

Khanna Publishing House

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

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

• Advanced Separation Processes: In-depth explanations of liquid-liquid extraction, crystallization, and membrane-based techniques.

• Practical Applications: Strong focus on real-world scenarios, including wastewater treatment and industrial process control.

• Safety & Instrumentation: Critical guidance on PID controllers and specialized gauges for operational safety.

• Competitive Exam Alignment: Content tailored to the requirements of GATE, AMIE, and PSU recruitment exams.

• Diverse Domain Scope: Covers emerging and miscellaneous topics like carbon sequestration and environmental engineering.

Khanna Publishing House

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

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

Table Of Contents

- Fluid Mechanics
- Instrumentation
- Valves
- Pumps
- Ejectors
- Fans, Blowers and Compressors
- Mixing
- Fluidisation
- Heat Transfer (Dimensionless Groups in heat Transfer)
- Temperature Measurement Instruments
- Thermal insulation
- Shell and Tube Heat Exchngers
- Evaporation and Evaporators
- Heat Pumps
- Steam Traps
- Compact Heat Exchangers
- Fired Heaters
- Mass Trasfer
- Mass Transfer with Chemical Reaction
- Packed Columns
- Mass Transfer Processes
- Diffusion
- Liquid-Liquid Extraction

Khanna Publishing House

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

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

- Solid-Liquid Extraction/leaching
- Crystallization
- Humidification and Water Cooling
- Drying
- Adsorption
- Distillation Column
- MISCELLANEOUS QUESTIONS

Author

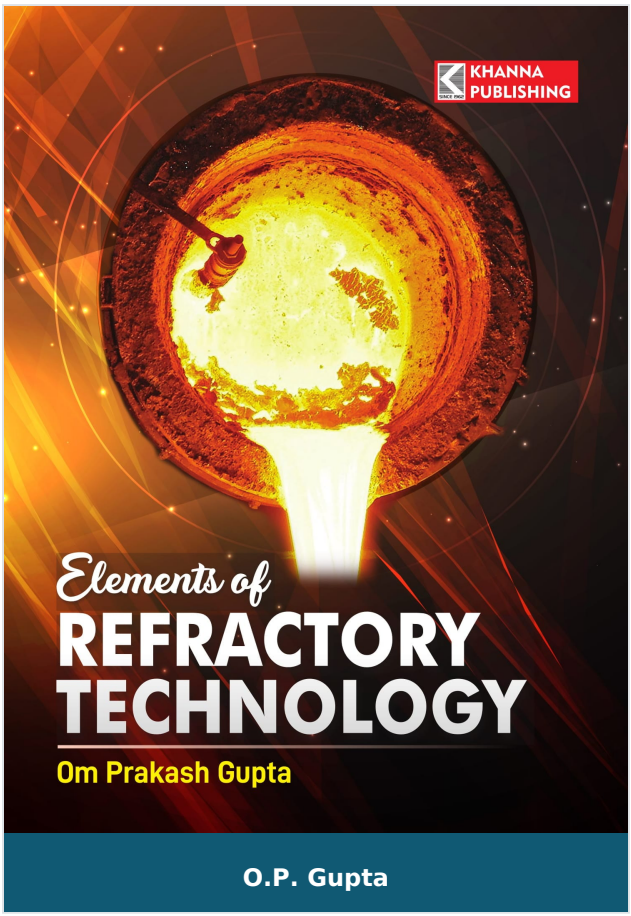
O.P. Gupta

O.P. Gupta Om Prakash Gupta is basically being a chemical engineer, he has a practising experience of efficient Ennergy management and HR functions in steel Industry for more than three decades. privileged to be the youngest writer of technical books in the country (for he had written his first book at the age of 24 years while doing M. Tech. at I.I.T kanpur in 1979), he has authored many frontline books for engineering students. besides, being the regular faculty member in technical courses for Management Trainees (Technical), he has also visited england and france on a study tour sponsored by United Nations Development Programme (UNDP) to study the scope of energy conservation in steel plants in 1987.

Khanna Publishing House

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

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



Elements of Refractory Technology

Author :	O.P. Gupta
ISBN 13 :	978-93-86173-64-5
ISBN 10 :	9386173646
E-ISBN 13 :	978-93-86173-64-5
Edition :	First
Pages :	320
Type of book :	Physical
Year :	2019
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 299.00
Categories :	Chemical Engineering, Book Store
Condition Type :	New
Country Origin :	India

Khanna Publishing House
4C/4344, Ansari Road, Daryaganj, New Delhi-110002
Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Product Description

This book describes the essential features of refractory technology and is useful for degree & diploma courses in engineering. AMIE, AMIIM and IICHE examinations. Short question & answers and multiple choice question & answers drawn from the examination paper of various engineering colleges and professional bodies examinations given at the end of the book enhances its utility for the students.

Khanna Publishing House

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

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

Table Of Contents

- Chapter-1:Introduction to Refractories
- Chapter-2: Manufacture, Properties and Applications of Important Refractories
- Chapter-3: Refractories used in Various Furnaces/Industries
- Chapter-4: Properties Testing of Refractory
- Chapter-5: Phase Equilibrium in Refractory materials
- Chapter-6: Insulating Refractories / Ceramic fibres
- Chapter-7: Special Refractories
- Chapter-8: Refractory - Cements/Mortars, Castables Ramming Masses
- Appendices :
- Appendix-A: Glossary of Terms (Related to Refractories)
- Appendix-B: Short Question & Answers on Refractory Technology
- Appendix-C: Multichoice Questions & Answer on ‘Refractory Technology
- Appendix-D: Technical Data on Refractories
- Appendix- References/Bibliography/Further Reading

Author

O.P. Gupta

O.P. Gupta Om Prakash Gupta is basically being a chemical engineer, he has a practising experience of efficient Ennergy management and HR functions in steel Industry for more than three decades. privileged to be the youngest writer of technical books in the country (for he had written his first book at the age of 24 years while doing M. Tech. at I.I.T kanpur in 1979), he has authored many frontline books for engineering students. besides, being the regular faculty member in technical courses for Management Trainees (Technical), he has also visited england and france on a study tour sponsored by United

Khanna Publishing House

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

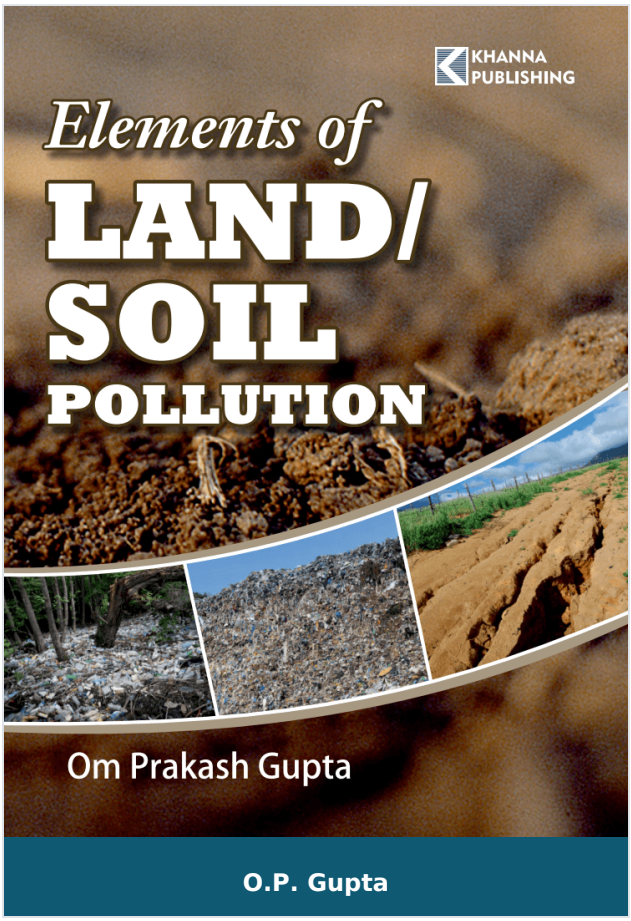
Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Nations Development Programme (UNDP) to study the scope of energy conservation in steel plants in 1987.

Khanna Publishing House

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

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



Elements of Land/Soil Pollution

Author :	O.P. Gupta
ISBN 13 :	978-93-82609-73-5
ISBN 10 :	9382609733
E-ISBN 13 :	978-93-82609-73-5
Edition :	First
Pages :	208
Type of book :	Physical
Year :	2019
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 299.00
Categories :	Civil Engineering, Environmental Engineering, Book Store
Condition Type :	New
Country Origin :	India

Khanna Publishing House
4C/4344, Ansari Road, Daryaganj, New Delhi-110002
Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Product Description

This book contains detailed description of sources, effects and control of soil pollution spanning over five chapters. Besides, it also contains two chapters devoted to short questions & answers and multiple choice questions & answers drawn from the examination papers of various engineering colleges for the benefits of the students. Last chapter contains glossary of terms related to soil pollution. The book will be useful for degree & diploma curriculum of various branches of engineering and for various associate membership examinations conducted by professional bodies like Institution of Engineers (AMIE), Indian Institute of metals (AMIIM), Indian Institute of Chemical Engineers (AMIIChE), etc.

SALIENT FEATURES OF THE BOOK:

Subject matter has been presented in simple, lucid & understand language. Cover all the topics included in the syllabus of various engineering colleges/Technical Institutes & professional bodies examination papers. Short questions & answers and multiple choice questions & answers drawn from the examinations given at the end of the book enhances its utility for the students.Up to date statistics and glossary of terms related to the subject have been included.

Khanna Publishing House

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

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

Table Of Contents

- Chapter-1. All about Soil—Its Formation, Types, Components & Properties
- Chapter-2. Introduction to Soil Pollution
- Chapter-3. Causes, Types, & Sources of Soil Pollution
- Chapter-4. Effects of Land/Soil Pollution
- Chapter-5. Prevention & Control of Land/Soil Pollution
- Chapter-6. Short Questions & Answers on Soil Pollution
- Chapter-7. Multiple Choice Questions & Answers
- Chapter-8. Glossary of Terms Related to Soil Pollution

Author

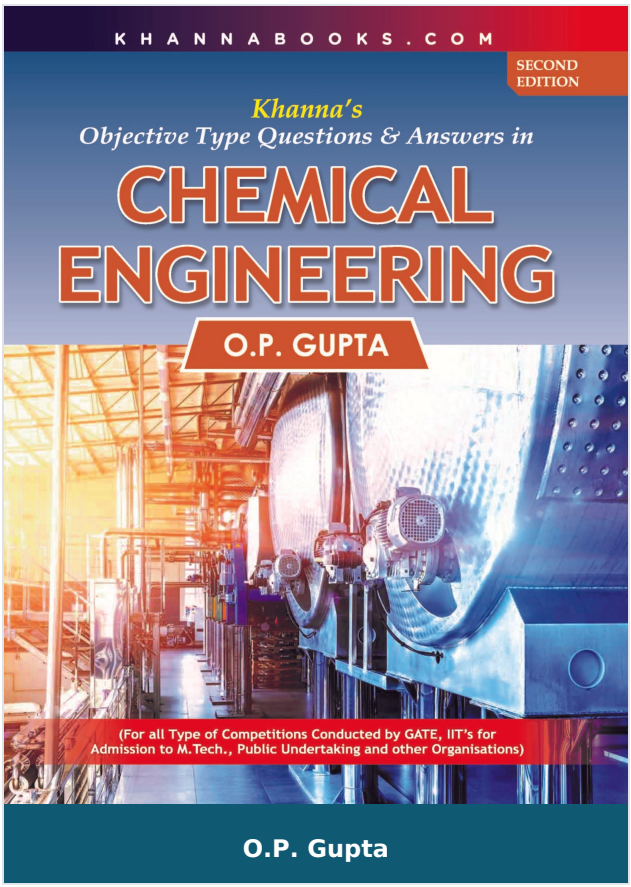
O.P. Gupta

O.P. Gupta Om Prakash Gupta is basically being a chemical engineer, he has a practising experience of efficient Ennergy management and HR functions in steel Industry for more than three decades. privileged to be the youngest writer of technical books in the country (for he had written his first book at the age of 24 years while doing M. Tech. at I.I.T kanpur in 1979), he has authored many frontline books for engineering students. besides, being the regular faculty member in technical courses for Management Trainees (Technical), he has also visited england and france on a study tour sponsored by United Nations Development Programme (UNDP) to study the scope of energy conservation in steel plants in 1987.

Khanna Publishing House

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

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



Khanna's Objective Type Questions & Answers in Chemical Engineering

Author :	O.P. Gupta
ISBN 13 :	978-81-95123-19-3
ISBN 10 :	8195123198
E-ISBN 13 :	978-81-95123-19-3
Edition :	Second
Pages :	396
Type of book :	Physical
Year :	2025
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 425.00
Categories :	OBJECTIVE TYPE BOOKS, Book Store
Condition Type :	New
Country Origin :	India

Khanna Publishing House
4C/4344, Ansari Road, Daryaganj, New Delhi-110002
Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Product Description

This book is meant for diploma students of chemical engineering and petroleum engineering both for their academic program as well as for competitive examinations. This book contains 18 chapters covering title entire syllabus of diploma course in chemical engineering and petrochemical engineering.

This book is its present form has been designed to serve as an encyclopedia of chemical engineering so as to be ready reckoner apart from being useful for all types or written tests and interviews faced by chemical engineering and petrochemical engineering are same as that of chemical engineering diploma students. So, this book will be-equally useful for diploma in petrochemical engineering students.

Khanna Publishing House

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

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

Table Of Contents

- Fluid Mechanics
- Stoichiometry (Process Calculation)
- Mechanical Operation
- Chemical Process Industries (Chemical Technology)
- Petroleum Refinery Engineering
- Fertiliser Technology
- Heat Transfer
- Mass Transfer
- Process Control and Instrumentation
- Chemical Engineering Thermodynamics
- Chemical Reaction Engineering
- Fuels and Combustion
- Materials of Construction
- Process Equipment Design
- Chemical Engineering Economics
- Environmental Engineering
- Polymer Technology
- Petrochemical Questions
- Miscellaneous Questions
- Interview Questions & Answers
- Gate-2018
- Gate-2019
- Gate-2020

Khanna Publishing House

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

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

- Gate 2021

Author

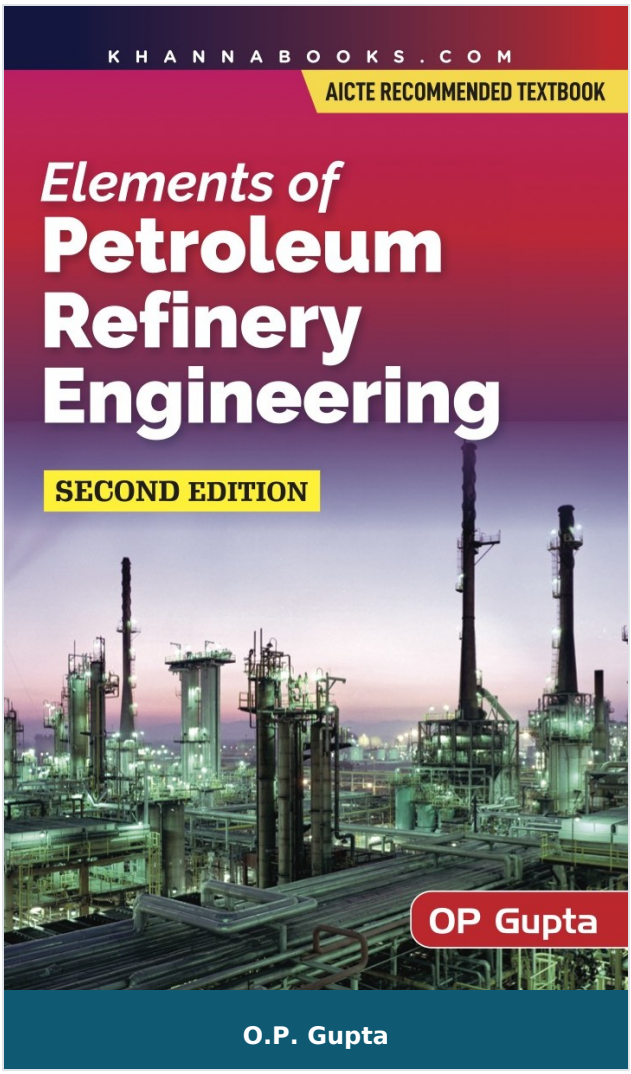
O.P. Gupta

O.P. Gupta Om Prakash Gupta is basically being a chemical engineer, he has a practising experience of efficient Ennergy management and HR functions in steel Industry for more than three decades. privileged to be the youngest writer of technical books in the country (for he had written his first book at the age of 24 years while doing M. Tech. at I.I.T kanpur in 1979), he has authored many frontline books for engineering students. besides, being the regular faculty member in technical courses for Management Trainees (Technical), he has also visited england and france on a study tour sponsored by United Nations Development Programme (UNDP) to study the scope of energy conservation in steel plants in 1987.

Khanna Publishing House

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

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



Elements of Petroleum Refinery Engineering

Author :	O.P. Gupta
ISBN 13 :	978-93-82609-72-8
ISBN 10 :	9382609725
E-ISBN 13 :	978-93-82609-72-8
Edition :	2
Pages :	492
Type of book :	Physical
Year :	2025
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 365.00
Categories :	Chemical Engineering, UNIVERSITY RECOMMENDED, Petroleum Engineering, Book Store
Condition Type :	New
Country Origin :	India

Khanna Publishing House
4C/4344, Ansari Road, Daryaganj, New Delhi-110002
Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Product Description

This book is prepared in a simple, lucid &easy understandable language with special emphasis on crude oil refining technologies and scenario in Indian context. This book is meant for the students, teachers, practicing engineer, consultants and policy makers on petroleum refining. Extensive use of Internet resources has been made in gathering the relevant information and the subject matter has been presented in a simple lucid manner for easy understanding of the subject.

This book is targeted to benefit the following:

1. Diploma in engineering students.

2. Degree in engineering students (B. Tech (Chemical Engineering,) B. Tech (Petroleum Engineering, B. Tech (Petrochemical Engineering), B. Tech (Aeronautical Engineering), AMIE, AMIICHE, Students etc.

3. Tech students of various disciplines pursuing courses on petroleum refining.

4. Faculty members/ Teaching staff of Engineering colleges/IIT’s/NIT’s etc.

5. Practicing petroleum engineers/consultants/refiners in various private sector/ public sector undertakings, state/ central government departments, NGO’s etc.

6. Students of foreign universities of developing countries pursuing diploma/ degree/ postgraduate courses in various engineering disciplines having a paper in petroleum refinery engineering.

7. The scope and coverage of the subject matter presented can be gauged from glancing the contents portion of the book to judge its suitability and relevance for a particular target group.

Khanna Publishing House

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

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

Table Of Contents

- Preface
- Definition
- Abbreviations
- Origin, Composition, Classification, Pretreatment & Transportation of Petroleum Crude Oil
- Indian Crude Oil & Oil Refineries
- Processing of Crude Oil-Refinery Operation & Products
- Thermal and Catalytic Cracking
- Thermal and Catalytic Reforming
- Polymerisation Alkylation and Isomerisation Processes
- Purification of Petroleum Products
- Properties of Petroleum Products
- Requisites of Good Quality Petroleum Products
- Storage and Handling of Petroleum Product
- General Appendix
- Objective Type Q&A in Petroleum Refinery
- References/ Bibliography/Further Reading
- Subject Index

Author

O.P. Gupta

O.P. Gupta Om Prakash Gupta is basically being a chemical engineer, he has a practising experience of efficient Ennergy management and HR functions in steel Industry for more than three decades. privileged to be the youngest writer of technical books in the country (for he had written his first book at the age of 24 years while doing M. Tech. at I.I.T

Khanna Publishing House

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

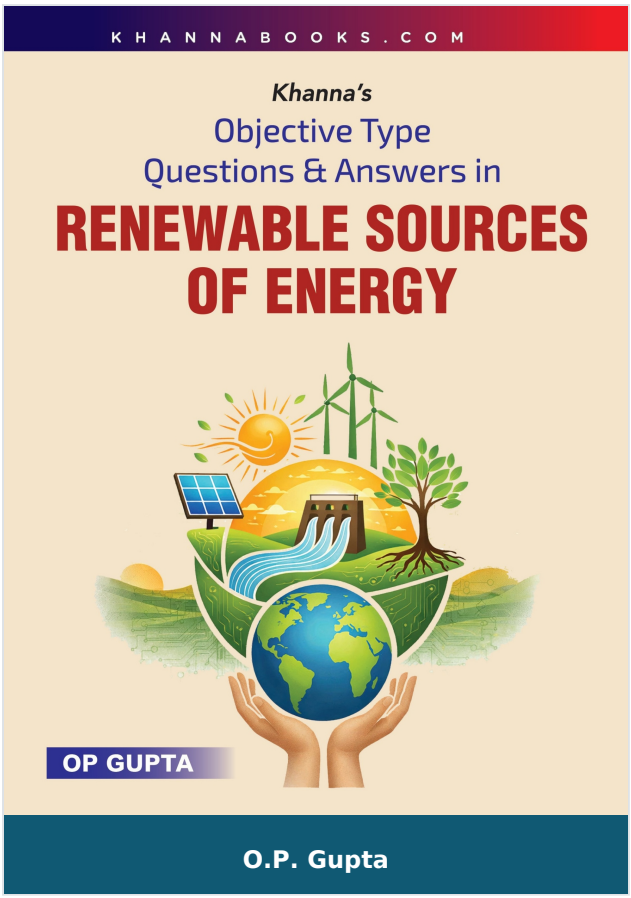
Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

kanpur in 1979), he has authored many frontline books for engineering students. besides, being the regular faculty member in technical courses for Management Trainees (Technical), he has also visited england and france on a study tour sponsored by United Nations Development Programme (UNDP) to study the scope of energy conservation in steel plants in 1987.

Khanna Publishing House

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

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



Khanna's Objective Type Questions & Answers in Renewable Sources of Energy

Author :	O.P. Gupta
ISBN 13 :	978-93-74549-43-8
ISBN 10 :	9374549433
E-ISBN 13 :	978-93-74549-43-8
Edition :	First
Pages :	192
Type of book :	Physical
Year :	2026
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 298.00
Categories :	OBJECTIVE TYPE BOOKS, New Arrivals, Environmental Engineering, Environmental Engineering, Book Store
Condition Type :	New
Country Origin :	India

Khanna Publishing House
4C/4344, Ansari Road, Daryaganj, New Delhi-110002
Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: +91-99109 09320

Product Description

Objective Type Questions and Answers in Renewable Sources of Energy is a comprehensive academic resource designed to provide a deep understanding of the rapidly evolving field of sustainable energy. Authored by Om Prakash Gupta, an experienced professional in human resource development and engineering, this book serves as a vital tool for mastering the theoretical and practical nuances of green technologies. It covers a broad spectrum of topics, including solar, wind, geothermal, biomass, and ocean energy, as well as emerging fields like nuclear fusion and Magneto Hydro Dynamic (MHD) power generation.

The book is specifically tailored to meet the curriculum needs of undergraduate, postgraduate, and diploma students across various engineering branches. It also serves as an essential preparatory guide for competitive associate membership examinations such as AMIE, AMIIM, and AMIICHE. By blending hundreds of objective-type questions with detailed short-answer explanations and an extensive glossary, the text ensures that readers can effectively bridge the gap between classroom learning and professional application. Whether you are a student, a faculty member, or a practicing consultant, this book offers a structured and engaging approach to mastering the clean energy paradigms of the future.

Salient Features

• Comprehensive Topic Coverage: This book provides an exhaustive exploration of non-conventional energy sources, including solar, wind, ocean, geothermal, biomass, hydropower, and nuclear fusion energy systems.

• Diverse Question Formats: Readers benefit from a dual-structured learning approach featuring over a hundred pages of objective-type questions followed by detailed short-answer explanations for conceptual clarity.

Khanna Publishing House

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

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

• Exam-Oriented Design: The content is meticulously aligned with the syllabi of major professional bodies and engineering universities, making it an ideal companion for AMIE and competitive exams.

• Technical Glossary Included: A specialized section dedicated to a glossary of terms ensures that students and professionals can quickly master the complex terminology used in renewable energy industries.

• Practical Working Principles: The book includes descriptive answers and sketches that explain the mechanics of advanced systems like OTEC, parabolic dish collectors, and geothermal flash steam plants.

• Environmental Impact Analysis: Beyond technical mechanics, the text addresses critical environmental considerations, such as waste treatment and the ecological benefits of moving away from fossil fuels.

• Professional Reference Value: While primarily academic, the book serves as a reliable reference for practicing engineers and consultants looking to refresh their knowledge on sustainable energy applications.

• Emerging Technology Insights: The content dives into modern energy conversion devices, offering specific insights into fuel cells, thermionic converters, and Magneto Hydro Dynamic (MHD) generators.

Khanna Publishing House

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

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

Table Of Contents

- SECTION A: Objective Type Questions Answers
- Introduction to Renewable Sources of Energy
- Solar Energy
- Wind Energy
- Ocean Energy
- Geothermal Energy
- Biomass Energy
- Hydropower
- Nuclear Fusion Energy
- Magneto Hydro Dynamic (MHD) Generator
- Miscellaneous Questions
- SECTION B: Short Answer Type Questions
- Short Answer Type Questions
- SECTION C: Glossary
- Glossary

Author

O.P. Gupta

O.P. Gupta Om Prakash Gupta is basically being a chemical engineer, he has a practising experience of efficient Ennergy management and HR functions in steel Industry for more than three decades. privileged to be the youngest writer of technical books in the country (for he had written his first book at the age of 24 years while doing M. Tech. at I.I.T kanpur in 1979), he has authored many frontline books for engineering students. besides, being the regular faculty member in technical courses for Management Trainees

Khanna Publishing House

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

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

(Technical), he has also visited england and france on a study tour sponsored by United Nations Development Programme (UNDP) to study the scope of energy conservation in steel plants in 1987.

Khanna Publishing House

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

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