



## Theory of Computation (With Formal Languages)

**Author :** Prem Nath  
**ISBN 13 :** 978-93-80016-52-8  
**ISBN 10 :** 93-80016-52-2  
**E-ISBN 13 :** 978-93-80016-52-8  
**Edition :** 2  
**Pages :** 480  
**Type of book :** Paperback  
**Weight (g) :** 627.00  
**Year :** 2020  
**Language :** English  
**Publisher :** Khanna Publishing House  
**Price :** Rs 319.00

**Categories :** [All book](#), [Computer Science Engineering](#), [Computer Science Engineering](#), [UNIVERSITY RECOMMENDED](#)

**Condition Type :** New  
**Country Origin :** India

---

### Product Description

---

This book has very simple and practical approach to make the understood the concept of automata theory and languages well. There are many solved descriptive problems and objective (multiple choices) questions, which is a unique feature of this book. The multiple choice questions provide a very good platform for the readers to prepare for various competitive exams.



**Khanna Publishing House**

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

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

---

## Table of Contents

---

Chapter 1: Preliminaries Used in Theory of Computation Chapter 2: Introduction to Finite Automata Chapter 3: Finite State Machines (Transducers) Chapter 4: Grammars and Languages Chapter 5: Regular Expressions, Regular Languages and Finite Automata Chapter 6: Context-free Grammars and Languages Chapter 7: Pushdown Automata and Parsing Techniques Chapter 8: Turing Machine Chapter 9: Computability and Recognizability of Turing Machine Chapter 10: Decidability and Undecidability Chapter 11: Introduction to Computational Complexity

---

## Author

---

### R.B. Patel

Prof. Ram Bahadur Patel, Professor, Department of Computer Science and Engineering, Chandigarh College of Engineering and Technology, U. T. Administration Chandigarh, earlier he was Professor at NIT Uttarakhand, graduated from Madan Mohan Malaviya Engineering College Gorakhpur in Computer Engineering in the year 1991. He did M.S. from BITS Pilani in the year 1996. He obtained his Ph.D. from the Indian Institute of Technology, Roorkee in the field of Distributed Computing and PDF in Reliable Computing from Athens Greece in the year 2005. He has supervised 18 PhD thesis and 42 M. Tech. dissertation. He has 4 Patents (1 US and 3 Indian) to his credit. He has published more than 190 research paper in International/National Journals and Conferences. He has organized 7 International Conferences/Seminars. He has edited 5 Scopus indexed Journal/Proceedings of National and International publishers, viz. Springer Verlag, American Institute of Physics etc. He has authored 7 Books on Data Structures, Automata Theory, etc.

**Prem Nath** Prem Nath has completed his B.E. (Computer Science and Engineering) from G.B. Pant Engineering College (H.N.B. garwal University)- Uttrakhand in 2000. He has worked in AICTE approved Engineering Colleges at Dehradun and Roorkee for 3 years. At present, he is working as Examiner of patents and Designs at the Patent Office, Kolkata. His work is to examine the patent Applications for which patent is to be ascertained in the field of Computer Science and Technology (Indian patent Act 1970 as amended in 2005). In brief, his work is based on examination of technical advancement as well as the legal aspect (The patent Act 1970 as amended in 2005). He has attended training at the Japan patent office, Tokyo, Japan in the field of "Computer programs" in Year 2007 sponsored by World Intellectual property organization (WIPO), also attended training time to time arranged by Patent Offices in Collaboration with many foreign bodies like, European patent Office (EPO), US patent and Trade marks office (USPTO), etc.

---

