This book presents a systematic exposition of Formal Logic, Evolution of Logic Programming and the features of Prolog Programming Language.

It covers both Propositional and Predicate Logic and explains various approaches towards validity, inconsistency of logic formulae and problem solving.

After explaining the basic concepts and rules in logic, the book presents Logic Programming and introduces Prolog. The various features of Prolog are suitably highlighted and programming techniques are explained in detail with illustrative examples.

The book further explains control primitives and meta-level programming.

The text includes a large number of solved examples to illustrate the concepts and techniques. Review exercises are given at the end of each chapter.

The book would serve as an excellent text for undergraduate and postgraduate Computer Science and Engineering students pursuing courses on Artificial Intelligence and Expert Systems.

Saroj Kaushik is currently Professor, Dept. of Computer Science & Engineering, Indian Institute of Technology, New Delhi. She obtained her Ph.D. in Computer Science from the same institute in 1980. She has been teaching undergraduate and postgraduate courses on Artificial Intelligence, Expert Systems and Logic and Functional Programming in the department for more than 20 years. She has also successfully guided research scholars for their Ph.D. degrees. She has published around 50 papers in prestigious national and international journals. She is a Fellow member of IETE.