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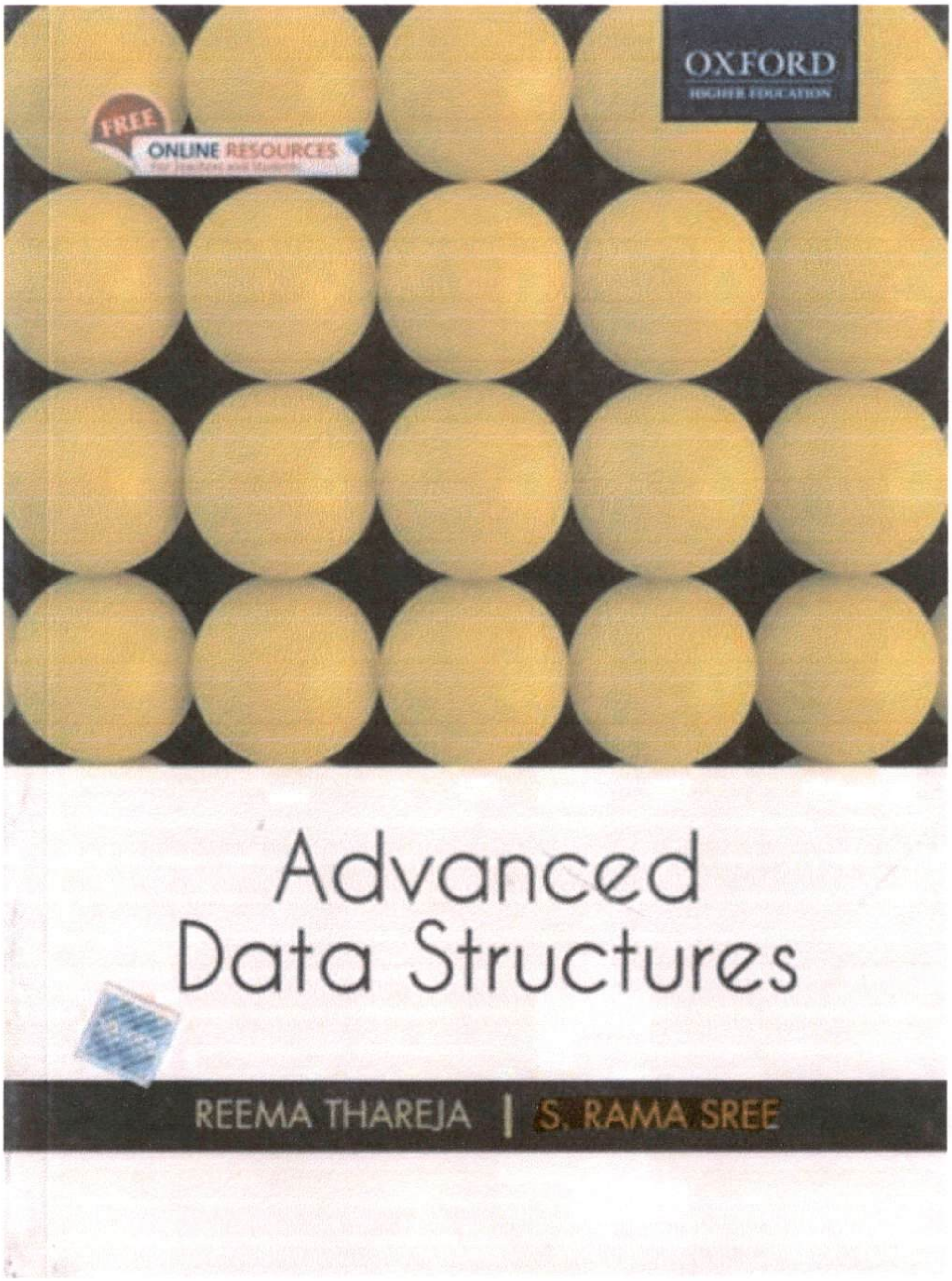

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Advanced Data Structures

REEMA THAREJA | S. RAMA SREE

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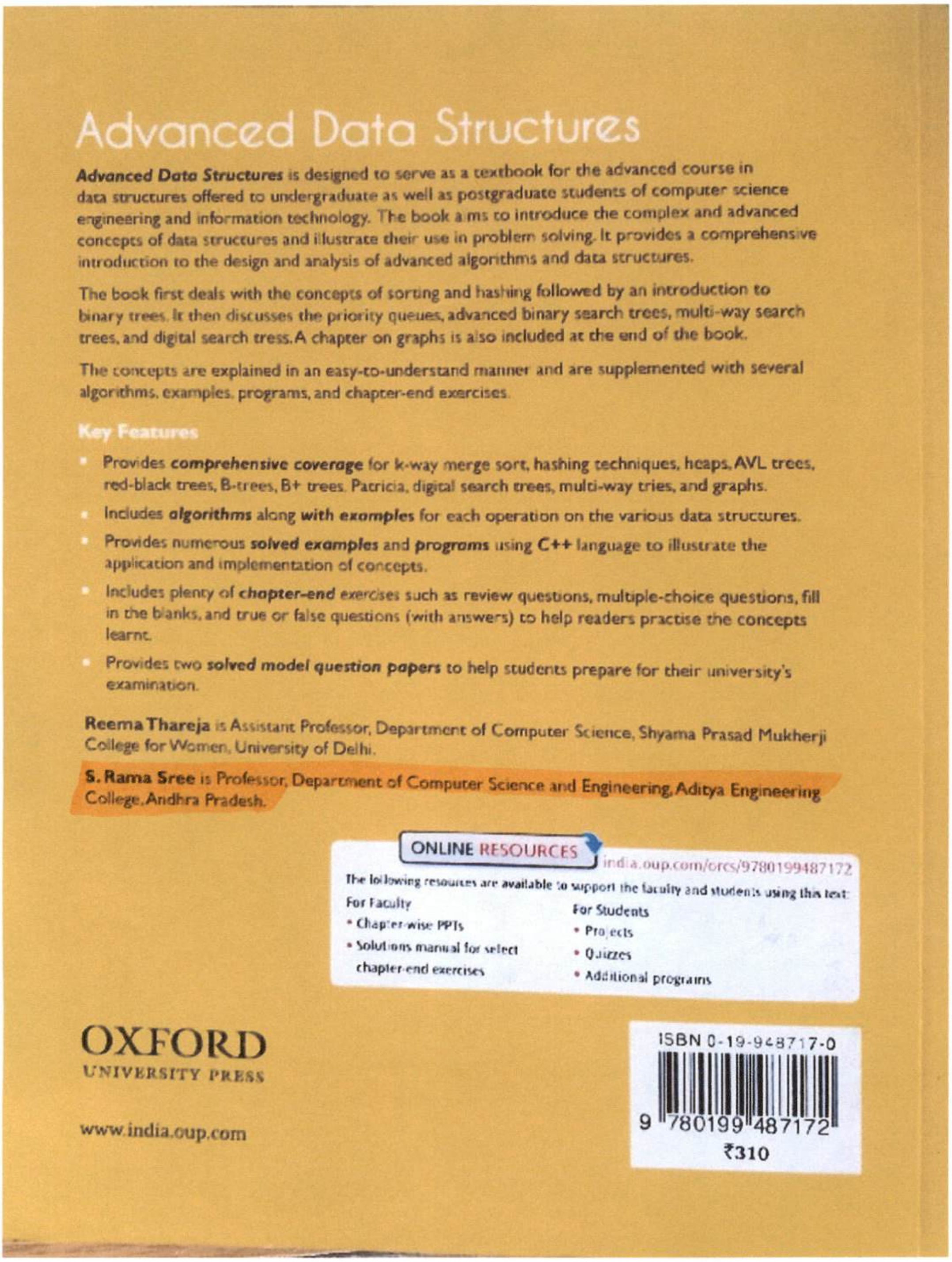

Advanced Data Structures

Advanced Data Structures is designed to serve as a textbook for the advanced course in data structures offered to undergraduate as well as postgraduate students of computer science engineering and information technology. The book aims to introduce the complex and advanced concepts of data structures and illustrate their use in problem solving. It provides a comprehensive introduction to the design and analysis of advanced algorithms and data structures.

The book first deals with the concepts of sorting and hashing followed by an introduction to binary trees. It then discusses the priority queues, advanced binary search trees, multi-way search trees, and digital search tress. A chapter on graphs is also included at the end of the book.

The concepts are explained in an easy-to-understand manner and are supplemented with several algorithms, examples, programs, and chapter-end exercises.

Key Features

- Provides ***comprehensive coverage*** for k-way merge sort, hashing techniques, heaps, AVL trees, red-black trees, B-trees, B+ trees, Patricia, digital search trees, multi-way tries, and graphs.
- Includes ***algorithms*** along ***with examples*** for each operation on the various data structures.
- Provides numerous ***solved examples*** and ***programs*** using ***C++*** language to illustrate the application and implementation of concepts.
- Includes plenty of ***chapter-end*** *exercises* such as review questions, multiple-choice questions, fill in the blanks, and true or false questions (with answers) to help readers practise the concepts learnt.
- Provides two ***solved model question papers*** to help students prepare for their university's examination.

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