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Nota di contenuto	Preface -- Part I. An Introduction to Inverse Combinatorial Optimization Problems -- An Outline of Inverse Combinatorial Optimization Problems -- Generalized Inverse Bottleneck Optimization Problems -- Generalized Inverse Maximum Capacity Path Problems -- Some General Methods to Solve Inverse Linear Programming Problem under Weighted 1 Norm -- Part II. Generalized Inverse Shortest Path Problems -- Shortest Path Improvement Problems -- Shortest Path Interdiction Problems on Trees -- Sum of Root-leaf Distance Interdiction Problems on Trees -- Restricted Inverse Optimal Value Problem on Shortest Path under Weighted 1 Norm on Trees -- Part III. Generalized Inverse

Spanning Tree Problems -- Inverse Minimum Spanning Tree Problems -- Inverse Max+Sum Spanning Tree Problems -- Restricted Inverse Optimal Value Problem on Minimum Spanning Tree -- Partial Inverse Minimum Spanning Tree Problems -- Part IV. Generalized Inverse Center Location Problems -- Inverse vertex obnoxious 1-center location problems -- Inverse Quickest 1-Center Location Problem on Trees -- References.

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Sommario/riassunto

This book offers an exploration into the emerging field of Inverse Combinatorial Optimization Problems (ICOPs), a transformative area within operations research. As traditional optimization focuses on maximizing or minimizing objectives under constraints, ICOPs reverse this process, allowing for the inference of hidden parameters from observed outcomes. This monograph provides a comprehensive framework for understanding and applying ICOPs across various domains. Key concepts such as inverse shortest path, spanning tree, and center location problems are meticulously examined, offering theoretical insights and algorithmic solutions. The authors present a structured approach to these complex problems, making this work an essential resource for both academic and practical applications. By addressing critical questions and providing algorithmic tools, this book is a must-read for those seeking to enhance network design, logistics, and strategic planning. Researchers, academics, and practitioners in operations research and management science will find this monograph invaluable. It not only contributes to academic discourse but also equips professionals with the knowledge to tackle real-world challenges. This book is a vital addition to any library supporting advanced studies in optimization and decision-making processes.

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