

Delo vsebuje dve poglavji  
razvejevanja in omejevanja  
in problemov, pri  
razvejevanju

Math. Subj. Class. (1980)

90 C 30

65 K 05

90 C 50

68 C 25

V delu so obravnavane teoretične osnove postopkov razvejevanja in omejevanja in primeri njihove uporabe.

Teoretične osnove slonijo na Mittenovem in Ibarakijevem pristopu k postopkom razvejevanja in omejevanja, omejene pa so predvsem na obravnavo vprašanj končnosti in pravilnosti postopkov.

Uporaba teoretičnih osnov je ilustrirana s pregledom pogostejših tipov postopkov, primerjavo s podobnimi metodami in problemi ter postopki za njihovo reševanje.

## LITERATURA

- / 1 / V. Batagelj: Optimizacijske naloge - osnovni pojmi, Seminar za numerično in računalniško matematiko, Ljubljana, 1978
- / 2 / V. Batagelj: Optimizacijske naloge: ekvivalentne, prirejene in dualne, Seminar za numerično in računalniško matematiko, Ljubljana, 1979
- / 3 / V. Batagelj, T. Pisanski, B. Vranješ: Diskretni optimizacijski procesi, Informatica 76, Bled, 1976
- / 4 / N. Christofides: Graph Theory: An Algorithmic Approach, Academic Press, London, 1975
- / 5 / H. Godec: Algoritmi za barvanje grafov, Diplomsko delo, Ljubljana, 1983
- / 6 / M. Held, R. M. Karp: The Traveling - Salesman Problem and Minimum Spanning Trees, Operations Research, 18 (1970) 1138-1162
- / 7 / E. Horowitz, S. Sahni: Fundamentals of Computer Algorithms, Computer Science Press, Inc., Maryland, 1978
- / 8 / T. Ibaraki: Computational Efficiency of Approximative Branch-and-Bound Algorithms, Mathematics of Operations Research, 1 (1976), 287-298
- / 9 / T. Ibaraki: The Power of Dominance Relation in Branch-and-Bound Algorithms, Journal of ACM, 24 (1977), 264-279
- / 10 / T. Ibaraki: The Power of Upper and Lower Bounding Functions in Branch- and-Bound Algorithms, Journal of Operations Research Society of Japan, 25(1982), 292-320.
- / 11 / J. Kozak: Podatkovne strukture in algoritmi, DMFA Slovenije, Ljubljana, 1984
- / 12 / L. G. Mitten: Branch and Bound Methods: General Formulation and Properties, Operations Research, 18 (1970) 24-34

- /13 / L. G. Mitten: Errata, Operation Research 19 (1971),  
550
- /14 / K. G. Murthy: Linear and Combinatorial Programming,  
New York, 1976
- /15 / N. J. Nilsson: Principles of Artificial Intelligence,  
Tioga Publishing Co., Palo Alto, 1980
- /16 / T. Pisanski: Kombinatorična optimizacija, Seminar  
sekcije za uporabno matematiko, DMFA Slovenije,  
Ljubljana, 1984
- /17 / A. H. G. Rinnooy Kan: On Mitten's Axioms for Branch-  
-and-Bound, Operations Research 24(1976), 1176-1178
- /18 / J. F. Shapiro: Mathematical Programming: Structures  
and Algorithms, John Wiley & Sons, New York, 1979
- /19 / T. H. C. Smith, V. Srinivasan, G. L. Thompson: Compu-  
tational Performance of Three Subtour Elimination  
Algorithms for Solving Asymmetric Traveling Salesman  
Problems, Annals of Discrete Mathematics, 1 (1977),  
495-506
- /20 / T. H. C. Smith, G. L. Thompson: A LIFO Implicit Enu-  
meration Search Algorithm for the Symmetric Traveling  
Salesman Problem Using Held and Karp's 1-Tree Relaxation,  
Annals of Discrete Mathematics, 1 ( 1977 ), 479-493
- /21 / V. I. Zangwill: Non Linear Programming: A Unified  
Approach, Prentice Hall, Englewood Cliffs, 1969
- /22 / N. Wirth: Računalniško programiranje, DMFA Slovenije,  
Ljubljana 1979
- /23 / C. Bron, J. Kerbosch: Finding All Cliques of an  
Undirected Graph, Communications of the ACM, 16 (1973),  
575-577