

POVZETEK VSEBINE.

Naloga je določiti lokalni ekstrem funkcije vezane z vezmi. Klasični dostop do rešitve problema vezanih ekstremov je metoda Lagrangeovih množiteljev. Določitev zadostnih pogojev kritične točke je glavni problem v tej diplomskej nalogi.

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Key words: extrema, minimum, maximum, Hessian matrix, Lagrangian function, saddle alternative.

LITERATURA:

1. K. G. Binmore, Calculus, Cambridge University Press, 1983.
2. F. Bowman and F. A. Gerard, Higher Calculus, Cambridge University Press, 1967.
3. C. Caratheodory, Calculus of Variations and Partial Differential Equations II, Holden - Day, 1965.
4. R. Courant and F. John, Introduction to Calculus and Analysis, Interscience Publishers, 1965.
5. G. Debreu, Definite and semidefinite quadratic forms, Econometrica, 20 (1952) 295 - 300.
6. C. H. Edwards, Jr., Advanced Calculus of Several Variables, Academic Press, 1973.
7. F. R. Gantmacher, The Theory of Matrices, Vol. 1, Chelsea, New York, 1977.
8. H. Hancock, Theory of Maxima and Minima , Ginn, 1917.
9. _____ Lectures on the Theory of Maxima and Minima of Function of Several Variables, University of Cincinnati Bulletin No. 13, Series II, Vol. II.
10. H. B. Mann, Quadratic forms with linear constraints, this MONTHLY, 50 (1943) 430-433.
11. J. Marsden and A. J. Tromba, Vector Calculus, 2nd ed., Freeman, 1976.
12. Y. Murata, Mathematics for Stability and Optimization of Economic Systems, Academic Press, 1977.
13. A. I. Ostrosky and J. V. Koch, Introduction to Mathematical Economics, Houghton Mifflin, 1979.
14. Ch. J. de la Vallée Poussin, Cours d'Analyse Infinitesimale, Dover Publications, New York, Vol. 1, 8th ed., Chapter III, Section 4 and Chapter IV, Section 3, 1946.
15. D. Spring, On the second derivativ test for constrained local extrema