Bul. Stiint. Univ. Baia Mare, Ser. B, Matematică-Informatică, Vol. XVIII(2002), Nr.1, 95 - 104 Because the C.-IST problem is Midners as were quitbely that the problem could be

Dedicated to Costică MUSTATA on his 50th anniversary

APPROXIMATION RESULTS FOR THE GENERALIZED MINIMUM SPANNING TREE PROBLEM

Petrică Claudiu POP

Abstract. We consider the Generalized Minimum Spanning Tree problem denoted by GMST. It is known that the GMST problem is NP-hard. Throughout this paper we distinguish between so-called positive results and negative results in the area of approximation theory. We present an in-approximability result for the GMST problem and under special assumptions we give an approximation algorithm for the problem.

MSC: 90C11, 90C27, 05C05, 90B10. Keywords: approximation algorithms, combinatorial optimization, generalized minimum spanning trees, LP relaxation.