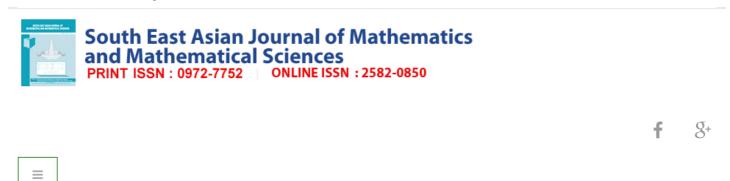⚙ Top links

🏠 Back to rsmams.org ➔ Feedback 📖 Contact Us

f   g⁺

≡

🏠 > South East Asian Journal of Mathematics and Mathematical Sciences > List of All Proceedings Articles

ON LOWER BOUND TREES FOR THE RADIO NUMBER

Author :

Payal Vasoya (Gujarat Technological University, Chandkheda, Ahmedabad - 382 424, Gujarat, INDIA)

Abstract

A radio labeling of a graph G is a function f from the set of vertices $V(G)$ to the set of non-negative integers such that $|f(u)-f(v)|\geq \diam(G) + 1 - d(u,v)$ for every pair of distinct vertices u,v of G. The radio number of G, denoted by $\rn(G)$, is the smallest number k such that G has radio labeling f with max$\{f(v):v \in V(G)\}$ $ = k. In [11, Theorem 3], Liu gave a lower bound for the radio number of trees and presented a class of trees, namely spiders, achieving the lower bound. A tree T is called a lower bound tree for the radio number if the radio number of T is equal to the lower bound given in [11, Theorem 3]. In this paper, we give two techniques which convert any tree to lower bound tree for the radio number by adding new vertices to given tree.

Keywords and Phrases

Radio labeling, radio number, tree.

A.M.S. subject classification

05C12, 05C15, 05C78.

.....

| View PDF | Click here to Subscribe now |

News & Events

⊕

Published issue of the South East Asian Journal of Mathematics and Mathematical Sciences, Vol. 20, No.2, August 2024

National Council for Science & Technology Communication (RASHTRIYA VIGYAN EVAM PRODYOGIKI SANCHAR PARISHAD) Department of Science and Technology sponsored workshop during November 06-10, 2024

Published issue of Journal of Ramanujan Society of Mathematics and Mathematical Sciences, Vol. 11, No. 2, June 2024

National Council for Science & Technology Communication (RASHTRIYA VIGYAN EVAM PRODYOGIKI SANCHAR PARISHAD) Department of Science and Technology sponsored workshop during September 07-11, 2024

Paper Submission Method (OJS): Submission method of article through new website of journal

Total View : Visitor Counter