Abstract

The concept of edge domination is introduced by Mitchell and Hedetniemi [6]. Further results on edge domination are given in Arumugam and Velammal [2]. Functional generalization for vertex subsets has been studied extensively in literature [4, 5]. Cockayne and Mynhardt [3] have introduced that edge subsets may also be embedded into sets of functions and an analogous concept of convexity could also be developed. In this paper we obtain results on minimal edge dominating functions of G(Zp, Q) and the convexity of these functions are discussed. The theory of Edge Dominating Functions in quadratic residue Cayley graphs helps in finding optimal global and local alignments for the smooth conduction of a work and improves the ability of a task or a job in connected systems such as transportation process, communication tools, networks etc.

References

- Arumugam, S., and Velammal, S. - Edge domination in graphs, Taiwanese Journal of
Edge Dominating Functions of Quadratic Residue Cayley Graphs


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Edge Dominating Functions – Minimal Edge Dominating Functions – Convexity