Abstract

Let $G(V,E)$ be a graph with $p$ vertices and $q$ edges. A graph $G(p,q)$ is said to be a Beta combination graph if there exist a bijection $f: V(G) \rightarrow \{1,2,\ldots,p\}$ such that the induced function $B_f: E(G) \rightarrow \mathbb{N}$, $\mathbb{N}$ is a natural number, given by $B_f(uv)=i$, every edges $uv \in G$ and are all distinct and the function $f$ is called the Beta combination labeling of $G$ [8]. In this paper, we prove quadrilateral snake $Q_n$, double triangular snake, alternate triangular snake $A(T_n)$, alternate quadrilateral snake $A(Q_n)$, helm $H_n$, the gear graph, Comb $P_n\cup K_1$, the graph $C_n\cup K_1$ and the diamond graph are the Beta combination graphs.

References

- B. D. Acharya and S. M. Hegde, Arithmetic graphs, J. Graph Theory, 14(3)(1990), 275-299.
On Beta Combination Labeling Graphs

- F. Harary, Graph Theory, Addison-Wesley, Reading, Massachusetts, 1972.
- S. M. Hegde and Sudhakar Shetty, Combinatorial Labelings of Graphs, Applied Mathematics E-Notes, 6(2006), 251-258.

Index Terms
Computer Science
Applied Mathematics

Keywords
Beta combination graph and Beta combination labeling.