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 $Bf: E(G) \rightarrow N$, $N$ is a natural number, given by $Bf(uv) = 1$, 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 $P_n \oplus K_1$, the graph $C_n \oplus K_1$ 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.
- 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.

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