Radio Analytic Mean Number family of Triangle Snake graphs

P Poomalai[1], R Vikramaprasad[2] and P Malliga[3]

[1]Research scholar, Department of Mathematics, Periyar University,
Salem, Tamilnadu, India
Email ID:poomalairec@gmail.com
[2]Assistant Professor, Department of Mathematics, Government Arts College
(Autonomous)
Salem, Tamilnadu ,India
[3]Assistant Professor, Department of Mathematics, Dhanalakshmi Srinivasan Arts and Science College Women (Autonomous), Perambalur, Tamilnadu ,India

ABSTRACT :A Radio Analytic mean labeling of a connected graph G is a one to one map f from the vertex v(G) to set Z such that for any two distinct vertices of u and v of G. d(u,v) + $\left\lceil \frac{|f(u)^2-f(v)^2|}{2} \right\rceil \geq$ 1+ dim G . The Radio Analytic mean number n, is the maximum number assigned to any vertex of G. The Radio mean number of G ,rmn(G) is the minimum value of taken all over Radio Analytic mean labeling of G. In this paper we find the Radio Analytic mean number of one triangle, Double triangle, Triple triangle, four triangle.

Keywords: Radio Analytic mean labeling, Radio Analytic mean graph, one triangle, Double triangle, Triple triangle, four triangle, diameter.

INTRODUCTION: All graphs in this paper finite , simple and undirected. All the notations here are used in the sense of Harary [2].The symbols V(G) and E(G) will denote the vertex set and edge set of a graph G. Graph Labeling was first introduced in the late 1960's .Many studies in graph labeling refer to Rosa's research in 1967 [3] .Labeled graphs serve as useful models for a broad range of applications such as X-ray, crystallography , radar, coding theory , astronomy, circuit design and communication network addressing .Particularly interesting applications of graph labeling can be found in [5 − 6]. The concept of Radio mean labeling was introduced and studied by R. ponraj [8] . The concept of Radio Analytic mean labeling was Introduced by P.Poomalai [9].

Definition 1.1: A single triangle snake $O(T_n)$ consists of one triangle snake that have a General path. That is a one triangle snake received from a path $v_1, v_2 \dots . v_n$.

Definition 1:2 : A double triangle snake D(T_n) consists of two triangular snake that have a General path. That is a double triangular snake obtained from a path $v_1, v_2 \dots . v_n$. Joining the vertices u_i and w_i the path graph.

Definition 1:3: A Triple triangle snake T(T_n) consists of three triangle snake that have a General path. The three vertices are joinined to the path graph.

Definition 1:4: A Four triangle snake F(T_n) consists of four triangle snake that have a General path. The four vertices are joinined to the path graph.

1