

1138-92-77

Inne Singgih*, 618 Pickens Street, Apt 5, Columbia, SC 29201, and **Kiki Ariyanti Sugeng** and **Denny Riama Silaban**. *DNA graph characterization for line digraph of dicycle with one chord.*

Characterization of DNA graph gives important contribution in completing the computational step of Sequencing by Hybridization (SBH). Some graphs are already characterized as DNA graph using (α, k) -labeling. Dicycle and dipath are DNA graphs, while rooted trees and self adjoint digraphs are DNA graphs if and only if their maximum degree is not greater than four. In this paper we also use (α, k) -labeling to characterize line digraph of dicycle with one chord C_n^t as DNA graph and show that for $m, n \in \mathbb{N}$, $t = \lfloor \frac{n}{2} \rfloor$, $L^m(C_n^t)$ are DNA graphs. (Received January 30, 2018)