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DEGREE SEQUENCES ON LINE GRAPH OF R-CORONA GRAPHS

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Abstract: A graph $G = (V, E)$ is a set of vertices, which are connected by edges. In this paper, we study the line graph of R-corona operations of complete, cycle and r-regular graphs in terms of degree sequences(DS).

Keywords and Phrases: Line graph, R- corona operations, complete, cycle and r-regular graphs.

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1. Introduction

Let $G = (V, E)$ be a simple connected graph which does not contains loops and multiple edge. The degree of vertex u is the number of vertices are adjacent to u and it is denoted as deg_u or d_u. A graph in which every two vertices are adjacent is called as a complete graph [5]. A closed walk is finite or infinite vertices and no vertex is repeated is called cycle [11]. A graph is said to be r-regular graph in which each vertex degree is r [8].

Tyshkevich et. al., [10, 4] established a correspondence between DSs of graph and some structural properties of the graph in 1981 and Bolloas started the study on DSs on the same year. The degree sequences DSs of a graph G is obtained by degree of vertices x_i of G in ascending or descending order and it is defined as $DS(G) = \{\aleph_1^{\ell_1}, \aleph_2^{\ell_2}, \aleph_3^{\ell_3}, ..., \aleph_n^{\ell_n}\}$ [2, 9].