A STUDY ON SUPPORT HIGHLY IRREGULAR GRAPHS

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Abstract: The concept of support highly irregular graph is introduced here. A graph is called support highly irregular (or merely SHI), if every vertex is adjacent only to the vertices with distinct support. Here, basic properties of support highly irregular graphs are studied and some results and theorems related to these graphs have been established.

Keywords and Phrases: Support of a vertex, highly irregular graph, support highly irregular graphs.

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1. Introduction and Basic Definitions

The graphs, we mention here are simple, finite and connected. Many types of irregular graphs are identified by grouping those graphs having similar properties and one of such graphs is support highly irregular graphs. S. Avadayappan, Bhuvaneswari and Sindhu [5] introduced support neighbourly irregular graphs. N. R. Santhi Maheswari and K. Amutha introduced Support neighbourly edge irregular graphs [4]. These ideas motivate us to introduce SHI graphs and some of its properties are discussed here.