On Gracefulness of Face Splitting Graphs of Cycles Related Graphs


A labeled graph $G$ which can be gracefully numbered is said to be graceful. Labeling the nodes of $G$ with distinct nonnegative integers and then labeling the $q$ edges of $G$ with the absolute differences between node values, if the graph edge numbers run from 1 to $q$, the graph $G$ is gracefully numbered. In this paper, we present here a new constructions of graceful graphs from face splitting extension of cycles and their related graphs which provided infinite families of new graceful graphs.

Keywords: graceful, face splitting extension, cycle graphs