

## ON MINIMUM COVERING SETS IN CONNECTED GRAPHS

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### Abstract

A vertex covering set  $M$  of a connected graph  $G = (V, F)$  is the subset of vertex set  $V$  which covers all the edges of the graph  $G = (V, F)$ . A vertex covering set with  $|M| = \alpha(G)$ , where  $\alpha(G)$  is the minimum vertex covering number is called the minimum vertex covering set in  $G$ . In this paper, we obtain some results on total number of vertex covering sets in connected graphs, paths and cycles.

**Keywords and phrases:** vertex covering set, minimum vertex covering set, vertex covering number, connected graphs.

Received May 13, 2015

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