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## On p-cluster sets and their application to p-closedness

M. N. MUKHERJEE and B. ROY

ABSTRACT. In this paper, the study of a new type of cluster sets for functions and multifunctions between topological spaces has been initiated by use of preopen sets of [8]. Such a notion of cluster sets is characterized and studied to some extent. In the process, a characterization of Hausdorffness is achieved in terms of the cluster set of a certain class of functions. An important application of the study is exhibited by establishing a characterization of the concept of *p*-closedness of [7] via the introduced idea of cluster set of multifunctions.

DEPARTMENT OF PURE MATHEMATICS
UNIVERSITY OF CALCUTTA
35, BALLYGUNGE CIRCULAR ROAD
KOLKATA-700019, INDIA
E-mail address: mukherjeemn@yahoo.co.in