BEST PROXIMITY POINTS THEOREM IN b-METRIC SPACES ENDOWED WITH A GRAPH

KAMAL FALLAHI* AND GHASEM SOLEIMANI RAD**

*Department of Mathematics, Payame Noor University P.O. Box 19395-4697, Tehran, Iran E-mail: fallahi1361@gmail.com (Corresponding author)

**Department of Mathematics, Payame Noor University P.O. Box 19395-4697, Tehran, Iran E-mail: gh.soleimani2008@gmail.com

Abstract. In this paper the existence and uniqueness of best proximity point for Reich-type contraction on b-metric spaces endowed with a graph is established. These results are significant, since we replace the condition of continuity of mapping with the condition of G-continuity of mapping and we consider b-metric spaces endowed with a graph instead of metric spaces, under which can be unified some theorems of the existing literature.

Key Words and Phrases: b-metric space, best proximity point, P-property, G-proximal. 2010 Mathematics Subject Classification: 41A52, 41A65, 05C40, 47H10.

Acknowledgments. The authors are thankful to the editor and the referees for their valuable comments to improve the paper.

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Received: June 21, 2018; Accepted: October 18, 2018.