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COMMON FIXED POINT THEOREM FOR SIX SELF MAPS IN A CONE METRIC SPACE THROUGH SEMI COMPATIBILITY AND WEAK COMPATIBILITY

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Abstract

In this paper, we prove a common fixed point theorem for six self mappings using the concept of semicompatibility and weak compatibility in a cone metric space, which generalize and improves the result of [Y. Rohen and M. Ranjit, Compatible mappings in cone metric spaces, Weakly commuting mappings after thirty years in metric fixed point theory, ISBN 978-88-548-4812-2, DOI 10.4399/97888548481225, 47-54] and [Pooja Sharma and R.S. Chandel, Compatibility for six self maps in a cone metric space, Int. J. Pure Appl. Sci. Technol., 11(1) (2012), 45-56].

Key Words : *Common fixed point, Cone metric space, Coincident point, Compatible maps, Semi compatible maps, Weakly compatible maps.*

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