

Abstract 82 – Paper ID: 089**Coupled Fixed Point in Partial Modular Metric Space**

Thokchom Rosy Devi¹, L. Shambhu Singh¹, Th. Chhatrajit Singh²

¹Department of Mathematics, Dhanamanjuri University, Manipur-795001, India

²Department of Mathematics, Manipur Technical University, Imphal, Manipur-795004, India

Email: rosythokchom1@gmail.com

Abstract

This work analyses the existence and uniqueness of coupled fixed points in partial modular metric spaces by means of the mixed monotone property. The findings broaden and generalize earlier coupled fixed point theorems, moving from partially ordered modular metric spaces to the more general framework of partial modular metric spaces. The obtained results are applicable to the investigation of nonlinear equations and systems of integral equations, and an illustrative example is included to demonstrate their effectiveness and practical applicability.

Keywords: Coupled Fixed Point, Partial Modular Metric Space, Mixed Monotone Property