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SOME NEW RESULTS FOR GENERALIZED T-CONTRACTIONS IN CONE s-GENERALIZED b-METRIC SPACE OVER BANACH ALGEBRA

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Abstract. In this paper, the concept of cone s-generalized b-metric space over Banach algebra and generalized T-contractions are introduced as a generalization of cone b-metric space over Banach algebra and T-contractions respectively. Also a similar generalization for b-metric space is obtained. We give an affirmative answer to open problem posed by Z. Kadelburg, S. Radenović and L. Paunović [Gulf J. Math., **3**(2015), No. 3, 57-67], by proving fixed point theorems for generalized T-contractive mappings in such space. In addition some examples are given to illustrate that our generalization is a real generalization.

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