RESULTS OF LOCAL AND GLOBAL MILD SOLUTION FOR IMPULSIVE FRACTIONAL DIFFERENTIAL EQUATION WITH STATE DEPENDENT DELAY

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Abstract. In this paper, we establish the existence of local and global mild solution for an impulsive fractional integro-differential equation with state dependent delay subject to nonlocal initial condition. The existence results for local mild solution are proved by applying the Schauder, nonlinear Larey Schauder alternative and Banach fixed point theorems. Then, we prove global existence result. An example is presented to demonstrate the application of the established results.

Mathematics subject classification (2010): 26A33, 47H10, 34A37, 34A12.

Keywords and phrases: fractional order differential equation, fixed point theorems, impulsive condition, nonlocal condition.

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