Mixed solutions of monotone iterative technique for hybrid fractional differential equations

ABSTRACT

In this present work we concern with mathematical modelling of biological experiments. The fractional hybrid iterative differential equations are suitable for mathematical modelling of biology and also interesting equations since the structure are rich with particular properties. The solution technique is based on the Dhage fixed point theorem that describes the mixed solutions by monotone iterative technique in the nonlinear analysis. In this method we combine two solutions, namely, lower and upper solutions. It is shown an approximate result for the hybrid fractional differential equations in the closed assembly formed by the lower and upper solutions.

Keyword: Fractional differential equations; Fractional operators; Monotone sequences; Mixed solutions