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Oscillation of first order delay differential equations with nonhomogeneous impulse

ARUN KUMAR TRIPATHY

Sambalpur University, India
arun_tripathy70@rediffmail.com

In this work, We have discussed the behaviour of solutions of a class of first order functional differential equations with impulsive effect of the form:

$$\begin{cases} z(s) - q(s)z(s - \sigma)' + p(s)f(z(s - \tau)) = 0 \\ \Delta z(\sigma_k) = \beta_k z(\sigma_k) + d_k. \end{cases}$$

The results are illustrated with examples under suitable fixed moments of impulsive effect.
Joint work with Rashmi R. Sahu.

Keywords: Oscillation, nonoscillation, neutral, impulsive differential equation, Schauder's fixed point theorem.

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