1067-39-300

Fatma Karakoc* (karakoc@science.ankara.edu.tr), Ankara University, Faculty of Science, Department of Mathematics, Tandogan, 06100 Ankara, Turkey, and Huseyin Bereketoglu and Gizem Seyhan. Oscillation of Impulsive Differential Equations with Piecewise Constant Argument.

The systematical studies with mathematical models involving piecewise constant arguments were initiated for solving some biomedical problems such as sequential-continuous models of disease dynamics. In this work, we investigate a linear impulsive delay differential equation with piecewise constant argument. We obtain some conditions for the existence and uniqueness of the solutions. Moreover, oscillation, nonoscillation and periodicity of the solutions are studied. (Received August 18, 2010)