Abstract

In this project, some new sufficient conditions to the oscillation property of all solutions for second order neutral differential equation with positive and negative coefficients and constant delays had obtained.

In chapter one, we introduced some basic concepts of delay differential equations and their properties. The definition of oscillation solution of differential equations with important properties of oscillation theory had explained. Some essential lemmas had given from the references.

Chapter two concerns to establish new lemmas and theorems to secure the oscillatory property of all solutions of second order neutral differential equation with positive and negative coefficients and constant delays.