

Ann. Funct. Anal. 4 (2013), no. 2, 12–26
ANNALS OF FUNCTIONAL ANALYSIS
ISSN: 2008-8752 (electronic)
URL:www.emis.de/journals/AFA/

PROPERTIES OF SOME DYNAMIC INTEGRAL EQUATION ON TIME SCALES

DEEPAK B. PACHPATTE

Communicated by S. Barza

ABSTRACT. The main objective of the paper is to study the existence, uniqueness and other properties of solution of certain dynamic integral equation on time scales. The tools employed are based on the application of the Banach fixed point theorem and certain integral inequality with explicit estimates on time scales.

DEPARTMENT OF MATHEMATICS, DR. B.A.M. UNIVERSITY, AURANGABAD, MAHARASHTRA 431004, INDIA.

E-mail address: pachpatte@gmail.com

Date: Received: 4 April 2012; Revised: 19 October 2012; Accepted: 17 November 2012. 2010 Mathematics Subject Classification. Primary 34N05; Secondary 26E70, 46S99.

 $Key\ words\ and\ phrases.$ Integral equation, explicit estimate, integral inequality, continuous dependence.