International J. of Pure & Engg. Mathematics (IJPEM) ISSN 2348-3881, Vol. 3 No. I (April, 2015), pp. 53-59

INDIRECT BACKWARD DIFFERENTIATION FORMULA FOR DELAY SINGULARLY PERTURBED VOLTERRA INTEGRAL EQUATIONS

M. H. ALNASR

Department of Mathematics and physics, Qatar University, Doha, Qatar

Abstract

Stability of a special class of linear multistep methods called indirect backward differentiation (IBD) are used for numerical solution of Delay singularly Perturbed Volterra Integral Equation (DSVIES). In particular, the stability analysis of method is considered.

Key Words: Indirect backward differentiating formula, Singularly perturbed problems, Volterra Integral Equation.

© http://www.ascent-journals.com