

AN ALGORITHM FOR APPROXIMATE SOLUTIONS OF VOLTERRA INTEGRAL EQUATIONS USING TRUNCATED BASKAKOV OPERATORS

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ABSTRACT. This study proposes a novel solution algorithm for Volterra integral equations of the first and second kinds, using truncated Baskakov operators. Based on this algorithm we find approximate solution of the first and second kind Volterra integral equations. Moreover, we give graphical and numerical evaluations containing both approximate and exact solutions of these integral equations with several examples.

Dedicated to the memory of Professor Gheorghe Sorin Gal, an unforgettable friend, colleague and master.

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