EXISTENCE OF SOLUTION OF FUNCTIONAL INTEGRAL EQUATIONS BY MEASURE OF NONCOMPACTNESS AND SINC INTERPOLATION TO FIND SOLUTION

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Abstract. In this article, we discuss the existence of solution for the functional integral equations in the Banach space $BC(\mathbb{R}^+)$ of real-valued continuous and bounded functions, using the method associated with the technique of measure of noncompactness and generalized Darbo fixed point theorem. We provide an example to illustrate our results, and we make an iterative algorithm by the Sinc interpolation to find solution to the above problem with acceptable accuracy.
Key Words and Phrases: Functional integral equations, measure of noncompactness, operator type contraction, Sinc interpolation, iterative algorithm.
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