The Arithmetic Mean iterative methods for sovling dense linear systems arise from first kind linear Fredholm integral equations

Abstract

In the previous studies, the effectiveness of the Arithmetic Mean (AM) iterative method and its variants for solving various scientific problems has been investigated. Consequently, in this paper, the implementation and performance one of the AM method variants i.e. Quarter-Sweep Arithmetic Mean (QSAM) method for solving dense linear system associated with the numerical solution of first kind linear Fredholm integral equations are considered. The details of the method are discussed. Some numerical analyses were also conducted to verify the efficiency of the method.