FOURTH-ORDER CONVERGENT TWO-STEP ITERATIVE ALGORITHM FOR SOLVING NON-LINEAR EQUATIONS

Muhammad Raza

Centre for Advanced Mathematics and Physics, National University of Sciences and Technology, Islamabad, PAKISTAN mraza@camp.nust.edu.pk

Dr. Farooq Ahmad

Principal, Govt. Degree College Darya Khan, Bhakkar, Punjab Education Department, PAKISTAN farooggujar@gmail.com

Sifat Hussain

Centre for Advanced Studies in Pure and Applied Mathematics, Bahauddin Zakria University, Multan, PAKISTAN siffat2002@gmail.com

ABSTRACT

In this paper we present fourth-order convergent two-step iterative algorithm for solving non-linear equations. This algorithm is refinement of the existing iterative algorithms. Numerical experiment shows this fact.

Keywords: Two-step iterative algorithms, Convergence-Order, Numerical examples.