Convergence properties of a 2-point using block of 4 backvalues backward differentiation formula

ABSTRACT

In this paper, we consider the 2-point using block of 4 backvalues Block Backward Differentiation Formula Method (2P4BBDF) that has been developed in [1]. We investigate the convergence properties namely; the order and zero stability of the 2P4BBDF. Zero stability and consistency conditions of the method are established. The order is shown to be 5.

Keyword: Consistency; Convergence; Order; Stability