Review of: "New Computational Methods Using Seventh Derivative Type for the Solution of First Order Initial Value Problems"

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Potential competing interests: No potential competing interests to declare.

Referee report on the manuscript

Dear Editor;

I have read the article entitled "New computational methods using seventh derivative type for the solution of first order initial value problems".
In this manuscript, the authors consider a class of implicit block methods of a seventh derivative type. These methods are examined through interpolation and collocation techniques using finite power series as the basis functions. The implementation of the methods is achieved by using the Newton-Raphson method. Overall, the manuscript is well-written. Conclusions are presented in an appropriate fashion and are supported by the numerical results. The manuscript is recommended for publication after **major revision**. Some comments are as follows.

1- In tables 2 and 3, P=10. The authors have not checked the order of the methods in tables 2 and 3. It is recommended to calculate the results for ***x*=**

$$\frac{1}{10}, \frac{1}{20}, \frac{1}{40}, \frac{1}{80}, \frac{1}{160}, \frac{1}{320}$$

and then obtain the desired order.

2- The authors have used very simple and linear examples. It is recommended to test the efficiency of the method for nonlinear differential equations.

3- Is the presented method also effective for the second order differential equation? Show the results with an example in the table.