

Review Form 1.7

Journal Name:	Physical Science International Journal
Manuscript Number:	Ms_PSIJ_101730
Title of the Manuscript:	On the Numerical Approximation of Higher Order Differential Equation $\gamma^{iv} = f(z, \gamma, \gamma', \gamma'', \gamma''')$
Type of the Article	

PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments 1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript) 2. Is the title of the article suitable? (If not please suggest an alternative title) 3. Is the abstract of the article comprehensive? 4. Are subsections and structure of the manuscript appropriate? 5. Do you think the manuscript is scientifically correct? 6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u>	1. This article discusses an actual problem of solving high-order differential equations, namely, a general block algorithm for solving problems with initial values (IVP) of a higher order using a linear block algorithm (LBA). This manuscript contains an extensive analysis of existing publications on the topic of research in recent years. Here a new solution method is proposed, its convergence and accuracy are proved. The examples show the minimum error of the obtained solutions. The results of the decisions are analysed using graphs. The manuscript also presents a comparative analysis of the new method with other existing methods for solving high-order differential equations. The advantages of the presented method are shown. 2. In my opinion, the title of the manuscript fully reflects its content. 3. The abstract of the manuscript is quite informative and gives an idea of the research problem. 4. The subsections and the structure of the manuscript have the correct correspondence. 5. This manuscript is scientifically correct, has a correct and consistent structure, correct descriptions, assessments and conclusions. 6. This manuscript contains an extensive review of publications on the research problem over the past five years.	-Noted
Minor REVISION comments 1. Is language/English quality of the article suitable for scholarly communications?	This manuscript is written in understandable mathematical/English language.	-Noted
Optional/General comments	I think that this study is of great importance for mathematicians studying methods for solving higher-order differential equations. In my opinion, the manuscript "On the Numerical Approximation of a Higher Order Differential Equation $\gamma^{iv} = f(z, \gamma, \gamma', \gamma'', \gamma''')$ " can be published in the Physical Science International Journal.	-Noted

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PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	