Review Form 3

Journal Name:	**Asian Research Journal of Mathematics**
Manuscript Number:	**Ms_ARJOM_124419**
Title of the Manuscript:	**A Six-Point y-Function Hybrid Block Method for Direct Solution of Third Order Ordinary Differential Equations**
Type of the Article	

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PART 1: Review Comments

Compulsory REVISION comments	**Reviewer's comment**	**Author's Feedback** *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	This manuscript makes significant contributions to the field of numerical methods for solving third-order ordinary differential equations (ODEs) by introducing a six-point y-function hybrid block method. Its importance lies in its direct approach to solving third-order initial value problems without reducing them to systems of first-order ODEs, which enhances computational efficiency. The manuscript also demonstrates the method's consistency, stability, and convergence, making it a reliable tool for handling high-order problems in fields such as engineering and biological sciences. I like this manuscript because it provides a novel, efficient solution method with minimal computational errors, as shown through its application to various sample problems. The clarity of its results and comparison with existing methods underline its superiority in terms of accuracy. However, a clearer explanation of the practical implications and broader applicability of the method could further enhance its impact.	
Is the title of the article suitable? **(If not please suggest an alternative title)**	**Yes**	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	**Yes**	
Are subsections and structure of the manuscript appropriate?	**Yes**	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	The manuscript is scientifically robust and technically sound. It presents a new method that directly addresses third-order ODEs without reducing them to first-order systems, which is both computationally efficient and innovative. The method is rigorously derived using interpolation and collocation, and its properties—such as stability, convergence, and consistency—are thoroughly analyzed. Additionally, the manuscript provides detailed numerical experiments that validate the accuracy and efficiency of the proposed method, demonstrating its superiority over existing methods. The detailed proofs of stability and convergence, combined with extensive comparisons to other methods, make the scientific foundation of the manuscript strong.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. **-**	**Yes**	

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Minor REVISION comments **Is the language/English quality of the article suitable for scholarly communications?**	Yes	
Optional/General comments		

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)*	

Reviewer Details:

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