

Review Form 1.7

Journal Name:	Journal of Advances in Mathematics and Computer Science
Manuscript Number:	Ms_JAMCS_97606
Title of the Manuscript:	HERMITE POLYNOMIAL-BASED METHODS FOR OPTIMAL ORDER APPROXIMATION OF FIRST-ORDER ORDINARY DIFFERENTIAL EQUATIONS
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journaljamcs.com/index.php/JAMCS/editorial-policy>)

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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)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. (Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</p>	<p>1. Yes, it is.</p> <p>2. Yes</p> <p>3. Yes, it is comprehensive.</p> <p>4. Yes, they are.</p> <p>5. Yes, it is.</p> <p>6. Yes, the references are okay looking at the size of the paper.</p> <p>See the attachment</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>1. Yes, it is</p>	
<p>Optional/General comments</p>	<p>REVIEW COMMENTS FOR RESEARCH ARTICLE Ms_JAMCS_97606</p> <p>Texts coloured red are suggestions that I feel are more appropriate at the designated places.</p> <p>1. On page 1, the first word is "The" but I feel "This" is more suitable. On the same page, the first line after the sub-topic Introduction. LMM should be inserted, in bracket, after linear multistep methods.</p> <p>2. On page 2, ODEs should be written in bracket after ordinary differential equations. On the second paragraph of the same page, et al. appeared twice but are both not italicized. They should be in italics. On the last paragraph of page 2, the first line of the paragraph, the citation is not correctly done. Instead of writing the names of all three authors, you write the surname of the first author then you put et al. Thus, the correct thing should be Olaiya et al. (2019).</p> <p>3. On page 3 first paragraph, the correction is as suggested – Aboiyar et al. (2015). On the second paragraph of same page, the first 4+ lines be replaced with the lines that follow them, coloured red, while the rest of the paragraph remain valid.</p> <p>4. For section 2: Derivation of linear multistep methods, the first four lines may appear as suggested. The unwanted texts have been removed for those lines.</p> <p>5. On page 4, equation (2.2), x be changed to y as suggested. A few other suggestions are made on the same page.</p> <p>6. For section 2.2, there is an error on equation (2.13). The correct thing has been suggested, coloured red.</p> <p>7. Major errors are noticed on equations 2.17, 2.18, 2.19, 2.20, 2.21, and 2.22. Many of the coefficients, almost all, in the stated equations are incorrect. This, by implication, makes equations 2.23 to 2.33 incorrect. I therefore suggest a complete rework of the equations. That is, from equation 2.17 to equation 2.33.</p> <p>8. Minor errors are observed on equations 2.34 and 2.35 as indicated. Since equations 2.36 to 2.63 all depend on the two equations, they are affected by the error. Though a few suggestion are made on the affected equations, I recommend that equation 2.34 to equation 2.63 be reworked.</p> <p>9. Texts coloured yellow in equations 2.23 and 2.46 be removed.</p>	

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	<p>10. Since the derived methods, used for implementation in section 3 are found wanting, I did not review section 3 which has results. This is because incorrect methods cannot produce correct results.</p> <p>11. The reference below is not found in the body of the article: Ehigie, J. O., Okunuga, S. A., Sofoluwe, A. B. and Akanbi, M. A. (2010). On Generalized Two-Step Continuous Linear Multistep Method of Hybrid Type for the Integration of Second Order ODEs. Archives of Applied Science and Research, Vol. 2(6) pp 362-372.</p>	
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PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

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