



**SDI Review Form 1.6**

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| Journal Name:            | <a href="#">British Journal of Mathematics &amp; Computer Science</a>                                                         |
| Manuscript Number:       | 2015_BJMCS_16252                                                                                                              |
| Title of the Manuscript: | <b>Implicit One-Step Legendre Polynomial Hybrid Block Method for the Solution of First-Order Stiff Differential Equations</b> |
| Type of the 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:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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**PART 1: Review Comments**

|                                            | <b>Reviewer's comment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Author's comment</b> <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>                                                                             |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b><u>Compulsory</u></b> REVISION comments | <ol style="list-style-type: none"> <li>1. The author should check line 50 i.e equations (3) properly and be sure that it is the true/correct representation of the first six term of Legendre polynomial he used.</li> <li>2. On table 1, the exact solution and the computed solution have the same values i.e the error is zero. Then, why numerical solution?</li> <li>3. The author should check the matlab programme properly, maybe there is a mistake somewhere.</li> </ol> <p>If not, the author should solve one problem more to replace problem 1.</p> | <ol style="list-style-type: none"> <li>1. It is the correct representation of the first six terms of Legendre polynomial</li> <li>2. Yeah, this simply shows that the one-step method is computationally reliable.</li> <li>3. The MATLAB program is correct</li> </ol> |
| <b><u>Minor</u></b> REVISION comments      | <ol style="list-style-type: none"> <li>1. Reduce the font of line 82. i.e the local truncation error.</li> <li>2. There are five definitions. Reduce them to 3 definitions. Definition (3) and (5) are not necessary, so remove them. Since your method is A-stable, definition (5) is not necessary.</li> <li>3. There are too many subsections under section 3. The author should merge subsections 3.3 and 3.4 together.</li> </ol>                                                                                                                           | <ol style="list-style-type: none"> <li>1. Noted</li> <li>2. We think the two definitions are relevant. They give clear picture of what the Order and Region of Absolute Stability of a method mean.</li> <li>3. Noted</li> </ol>                                        |



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|  | <p><b>References</b></p> <ol style="list-style-type: none"><li>4. The author should be consistent in using title case , for instance, use title case in reference 3.</li><li>5. If possible, put the page numbers in [6], [9] and [12]</li><li>6. I searched through the net for reference [7]. The author should be sure the ref [7] 's year is 2007 and not 2003 .</li><li>7. The author should kindly provide Digital Object Identifier (DOI) number for all references [DOI System is for identifying content objects in the digital environment. DOI names are assigned to any entity for use on digital networks. They are used to provide current information, including where they (or information about them) can be found on the Internet.</li></ol> <p>If in case, there is no DOI for any reference, kindly provide its URL. All other references i.e. without DOI or internet link should be removed or replace them with DOI references.</p> | <ol style="list-style-type: none"><li>4. Noted</li><li>5. Noted</li><li>6. Noted</li><li>7. Noted</li></ol> |
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