SDI Review Form 1.6

| Journal Name: | Asian Research Journal of Mathematics |
| :---: | :---: |
| Manuscript Number: | Ms_ARJOM_42333 |
| Title of the Manuscript: | ON THE BUCKLING MODES AND BUCKLING LOAD OF AN INFINITELY LONG BUT HARMONICALLY IMPERFECT COLUMN LYING ON CUBIC - QUINTIC FOUNDATION. |
| 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. o 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)

SDI Review Form 1.6
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) |
| :---: | :---: | :---: |
| CompulsoryREVISION comments | a) What is the source of this? $\begin{equation*} E I \frac{d^{4} W}{d X^{4}}+2 P \frac{d^{2} W}{d X^{2}}+k_{1} W+\alpha k_{2} W^{3}-\beta_{1} k_{3} W^{5}=-2 P \frac{d^{2} \bar{W}}{d X^{2}}, \quad-\infty<X<\infty \tag{2.1} \end{equation*}$ <br> b) "We shall solve the equation in two slightly different approaches whereby, in the first approach, we adopt the perturbation and asymptotic parameter as a component of displacement whereas in the second approach, we adopt the perturbation parameter as a component of the applied load" Are these methods yours? If they are not yours quote the source. If they are yours justify use of them. <br> c) $\operatorname{Plot}\left[\left(n^{\wedge} 4+1\right) /\left(2^{*} n^{\wedge} 2\right),\{n,-1,1\}\right]$.Out of curiosity I tried to plot <br> To see if the lowest value of lamda is when $n=1$ the graph from Mathematica gave different opinion that its lowest on $n$ less than 0.5. Check <br> You need to justify the use of these so many let or you quote the source method like equations 4.1, 3.8 .e.t.c |  |
| Minor REVISION comments | i. Discuss your graphs <br> ii. Quote the source of methods and give insight to reader on what they entail |  |
| Optional/General comments |  |  |

## Reviewer Details:

| Name: | Cyrus Gitonga Ngari |
| :--- | :--- |
| Department, University \& Country | Department of Mathematics, Computing and Information Technology, University of Embu, Kenya |

