Review Form 1.6

Journal Name:	Asian Research Journal of Mathematics
Manuscript Number:	Ms_ARJOM_88978
Title of the Manuscript:	**A Mathematical Model Approach for Prevention and Intervention Measures of the COVID{19 Pandemic in Uganda**
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:

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

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	**The article propose a mathematical model for simulating the spread of Covid-19 disease. The mathematical model is a classical Susceptible–Exposed–Infected– Expected recoveries (SEIR). The article is written in a satisfactory way**	
Minor REVISION comments	a misprint one hundred twenty seven (126) P. 4, L-22	
Optional/General comments	Here are my comments. The SEIR model seems to be established in a correct way. The reproductive number is computed in a classical manner. I am just questioning about the sensitivity index with respect to parameter gamma. It is claimed to be zero, but if one computes the derivative of the reproductive number with respect to gamma the derivative is negative and not zero. That should be explained or corrected. I have a deep questioning about the explanation concerning Fig 5 (b). The infected people number grows, the decreases and grows after some time. The analysis of the differential equations model is light and could be improved. The invariant area of the model is not characterized, neither the infection–free steady state (attractive point or repulsive one). I suggest to have a look to the following papers where such studies are conducted: Mathematical Model of HIV-1 Circulating Recombinants Forms in Mali Journal of Modeeling and Simulation 3(04):137-145 2015; Dynamics and Thresholds of a Simple Epidemiological Model: Example of HIV/AIDS in Mali International Journal of Mathematics and Mathematical Sciences 2010 Diallo Ouaténi Koné Yaya and Jerome Pousin. A Mathematical Model of COVID-19: Analysis and Identification of Parameters for Better Decision Making O. Diallo; Y. Koné; C. Sang; J. Pousin Applied Mathematics 2022, 13 205-214 After the authors have taken into account these remarks, the paper could be published in the Journal of Advance in Mathematics and Computer Science	

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:

Name:	**Jerome Pousin**
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