Review Form 1.7

Journal Name:	**Journal of Advances in Mathematics and Computer Science**
Manuscript Number:	**Ms_JAMCS_111022**
Title of the Manuscript:	**Probabilistic Population Modeling with Interactions between Species**
Type of the Article	**Original Research Article**

<mark>**PART 1:**</mark> **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 1. **Is the manuscript important for scientific community?** (Please write few sentences on this manuscript) 2. **Is the title of the article suitable?** (If not please suggest an alternative title) 3. **Is the abstract of the article comprehensive?** 4. **Are subsections and structure of the manuscript appropriate?** 5. **Do you think the manuscript is scientifically correct?** 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)**	Manuscript ID : Ms JAMCS 111022 Title : Probabilistic Population Modeling with Interactions between Species In this research, the authors propose a probabilistic population model with interactions between species, speci_cally focusing on predator-prey dynamics. The model is developed using a system of probabilistic di_erential equations that incorporate assumptions about the environment and various parameters. Detailed information regarding the conditions, assumptions, and parameters for the probabilistic model is provided in Section 1. The authors introduce three types of models, each describing the probabilistic di_erential equations for prey and predator populations. The paper explores the solutions to these equations and presents a system of nonlinear probabilistic di_erential equations governing prey-predator dynamics. Furthermore, the authors discuss the expectations and variances of population sizes and provide interpretations for di_erent models. The paper concludes with the solution to the probabilistic di_erential equations and explores the expectations of predator population density. The proposed models o_er insights into the complex dynamics of predator-prey interactions, considering both deterministic and probabilistic aspects. The study appears to be original and accurate but demands a certain level of technical pro_ciency. The outcomes of the research are intriguing and signi_cant. Therefore, the paper is suitable for publication, provided that the following revisions/corrections are integrated into the _nal version. = (b c:y)y + nxy and y(0) = y0. 2. On page 2, line 10, remove one "ii)" from both. 3. On page 2, line 11, eliminate the word "alpha." 4. On page 2, line 18, de_ne pn and pm before using them. 5. On page 4, line 14, replace "Let's take the limit when delta t ! 0, then:" with "Let's take the limit when _t ! 0, then:". 6. On page 8, replace equation (14) with 1. On page 1, the second equation of system (1) requires a "," between dy dt Vn(t) dt = _pm(t)[Vn1(t) Vn(t)] () Vn(t) dt = _ Um(t) m [Vn1(t) Vn(t)]: 7. It is recommended to use the journal's reference style.	
Minor REVISION comments 1. **Is language/English quality of the article suitable for scholarly communications?**		
Optional/General comments		

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	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)*	

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