

**Review Form 3**

Journal Name:	<b>Asian Research Journal of Mathematics</b>
Manuscript Number:	<b>Ms_ARJOM_122173</b>
Title of the Manuscript:	<b>Total Offensive Alliances on Some Graphs</b>
Type of the Article	<b>Original Research Article</b>

**Review Form 3**

**PART 1: Review Comments**

<b><u>Compulsory</u></b> REVISION comments	Reviewer's comment	<b>Author's Feedback</b> <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p>	<p>An offensive alliance in a graph <math>G</math> is a set <math>S</math> of vertices with the property that every vertex in the neighborhood of <math>S</math> has at least one more neighbor in <math>S</math> than it has outside of <math>S</math>. This paper introduces the concept of total offensive alliance, an extension of the offensive alliance. A nonempty set of vertices <math>T \subseteq V(G)</math> is called a total offensive alliance in <math>G</math> if <math>T</math> is an offensive alliance in <math>G</math> and every vertex in <math>T</math> has at least one neighbor in <math>T</math>. Moreover, the minimum cardinality of a total offensive alliance in <math>G</math> is called the total offensive alliance number of <math>G</math>, denoted by <math>a_{to}(G)</math>. This paper presents the total offensive alliances to some graph families particularly path, cycle, complete, star, fan, and wheel graphs. It examines the properties and nature of total offensive alliances within these graph structures to determine their characterizations and also identifies the corresponding total offensive alliance number of these graphs.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>Yes</p>	
<p>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>It is better to mention in the abstract that the authors introduce and characterize the concept of TOA. That is, instead of "In this paper, we provide the characterizations of total offensive alliance....", make it as "In this paper, we introduce and provide the characterizations of total offensive alliance..."</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Yes</p>	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>It speaks about TOA and give characterizations about it. It is a new idea introduced by the authors and scientifically established the concept by characterising it. The results seems to be logically correct.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>Yes</p>	
<p><b><u>Minor</u></b> REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>Yes</p>	
<p><b><u>Optional/General</u></b> comments</p>		

**Review Form 3**

**PART 2:**

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

**Reviewer Details:**

Name:	<b>Jomon Kottarathil</b>
Department, University & Country	<b>St. Joseph's College, India</b>