

Review Form 3

Journal Name:	Asian Research Journal of Mathematics
Manuscript Number:	Ms_ARJOM_122754
Title of the Manuscript:	Hilbert Graceful Labeling on Complete Multipartite Graph
Type of the Article	Original Research Article

Review Form 3

PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
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.		
Is the title of the article suitable? (If not please suggest an alternative title)		
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.		
Are subsections and structure of the manuscript appropriate?		
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.		
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.		

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<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>		
<p>Optional/General comments</p>	<p>Title: Hilbert Graceful Labeling on Complete Multipartite Graph Let G be a simple, finite, connected, undirected, non-trivial graph with p vertices and q edges. V(G) be the vertex set and E(G) be the edge set of G. The nth Hilbert number is denoted by H_n and is defined by $H_n = 4(n-1) + 1$ where n=1. A Hilbert graceful labeling is an injective function H from the vertex set V(G) to a set of Hilbert number $\{x: x=4(i-1)+1, 1 \leq i \leq 2q\}$ which induces a bijective function H[*] from the set E(G) to the set of number $\{1, 2, 3, 4, \dots, q\}$, where for each edge uv ∈ E(G) with u, v ∈ V(G) applies $H^*(uv) = \frac{1}{4} H(u) - H(v)$. A graph with Hilbert graceful labeling is called a Hilbert graceful graph. This research aims to prove some complete multipartite graphs are Hilbert graceful. Paper is well written I recommend for minor revision. 1) The literature review is well-written but can be expanded. Update the literature review to include the most recent studies (2023-2024) on related topics, particularly focusing on twinpreserving subgraphs and their applications in various fields. 2) There are a few typographical errors noted. 3) Some terms are introduced without detailed explanations. 4) The references are well-curated but could be more current. 5) Cite Hanif, M. F., Mahmood, H., Ahmad, S., & Fiidow, M. A. (2024). On comparative analysis of a two dimensional star gold structure via regression models. <i>Scientific Reports</i>, 14(1), 15712., Huang, R., Hanif, M. F., Hanif, M. F., Siddiqui, M. K., Hussain, M., & Bashier, E. (2024). Exploring Entropy Measures with Topological Indices on Subdivided Cage Networks via Linear Regression Analysis. <i>Applied Artificial Intelligence</i>, 38(1), 2387490.</p>	

PART 2:

	<p>Reviewer's comment</p>	<p>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)</p>
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes. Kindly please write down the ethical issues here in details)</i></p>	

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