Some Class of golden graphs and its construction

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In this paper, we generated some class of golden graphs (Graphs with eigenvalues as golden ratio). First, we have proved logically that, for which n (number of vertices), tree A_n (double headed snake) and Prism I_n are golden graphs. Next which Mobious ladder are golden graphs and also proved $C_{5k} + K_1$ are golden graphs. And also for which values of i, j, k the tree $T[i, j, k]$ are golden graph. Similarly, for which values of $i_1, i_2, \ldots, i_n$ the tree $T[i_1, i_2, \ldots, i_n]$ are golden graphs. We have proved logically that the tree U_n (single headed snake) is not golden graph. We have proved the graph $G_1 + G_2$, where G_1 is regular graph and G_2 is prism, as golden graph and also $\overline{K_n} + P_4$ as golden graph. In the end we have constructed golden graphs using prism, Mobious ladder, trees $(T[i, j, k], T[i_1, i_2, \ldots, i_n])$, $C_{5k} + K_1$, $G + P_4$ and $G + C_5$.

References

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