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CERTIFICATE

This is to certify that the thesis entitled "*Inverse 1-Center and Minimum Average Distance Problems on Graphs*" which is being submitted by **Biswanath Jana**, a research scholar in the **Department of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University, Midnapore, India** in fulfillment of the degree of **Doctor of Philosophy in Science** is a record of bonafide research work carried out by him under our supervision and guidance. The thesis has fulfilled all the requirements as per the regulations of the Vidyasagar University, Midnapore. The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

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