CERTIFICATE

This is to certify that the thesis entitled "STUDIES ON SOME TRANSPORTATION PROBLEMS IN DIFFERENT ENVIRONMENTS" being submitted to VIDYASAGAR UNIVERSITY by Sri Srikanta Samanta for the award of degree of DOCTOR OF PHILOSOPHY in SCIENCE is a record of bona fide research work carried out by him under my guidance and supervision. Sri Samanta has worked in the Department of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University as per the regulations of this University.

In our opinion, this thesis is of the standard required for the award of the degree of DOCTOR OF PHILOSOPHY in SCIENCE.

The results, embodied in this thesis, have not been submitted to any University or Institution for the award of any degree or diploma.

(Dr. Shyamal Kumar Mondal, Professor)

Shyamed Kr Mondal

Department of Applied Mathematics with Oceanology and Computer Programming

Vidyasagar University, Protection of Applied Mathematics With Oceanology & Computed Ptogramming, West Bengal, Vidyasagar Haiyersity, Midnapore Pin-721102, W.B.