



Department of Fishery Sciences Vidyasagar University Michapore - 721 102, West Bengal, India

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Date: 16.09.2019

<u>Certificate</u>

This is to certify that the research work embodied in this thesis entitled "STUDIES ON SEASONAL AND SEX VARIATIONS IN BIOLOGY AND ANATOMICAL PECULIARITIES OF CERTAIN INDIAN MAJOR CARPS" has been carried out by MRS. SUSMITA DAS under my supervision and guidance. She has followed the rules and regulations as laid down by Vidyasagar University for the fulfillment of requirement for the degree of Doctor of Philosophy (Science). This research dissertation is original and based on the extensive survey blended with laboratory studies. I sincerely believe that any part of this research dissertation has not been submitted elsewhere for any other degree or award. The assistance and help received during the course of investigation have been duly acknowledged.

I wish her all success in life.

Date: 16.09.2019

Place: Midnapore

(Dr. Joydev Maity)

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