



# VIDYASAGAR UNIVERSITY

## DEPARTMENT OF ZOOLOGY

P.O.: Vidyasagar University, Midnapore – 721 102, Dist.: Paschim Medinipur,  
West Bengal, INDIA

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### Certificate

This is to certify that the thesis entitled “*Molecular identification and pathogenicity study of the Klebsiella pneumoniae isolated from fishes of West Bengal*” submitted by Mr. Abhishek Das registration number- 0877/Ph.D./Sc. for the degree of Doctor of Philosophy in Science (Zoology) of the Vidyasagar University, is a record of original research work carried out under my supervision and guidance. Plagiarism check certificate was provided by the Vidyasagar University, mentioning 1% plagiarism which is within the permissible limit as per UGC guideline.

The results incorporated in the present thesis have not been submitted either in part or in full for any degree or diploma to this or any other university. All rules and regulations laid down by the University for the Fulfillment of requirement for the degree have been followed by him.

Also he has incorporated all the corrections and changes in the thesis as suggested by the examiners. The work is worthy of consideration for the Award of the degree of Doctor of Philosophy (Science).

I wish him all success.

(Sagar Acharya)

Date: 05-04-2021

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भाकृअनुप-केन्द्रीय अंतर्स्थलीय मात्स्यकी अनुसंधान संस्थान

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(भारतीय कृषि अनुसंधान परिषद)

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*An ISO 9001:2015 Certified Organization*

(Indian Council of Agricultural Research)

Barrackpore, Kolkata-700120, West Bengal



Date: 05-04-2021

**Certificate**

This is to certify that, the thesis entitled “**Molecular identification and pathogenicity study of the *Klebsiella pneumoniae* isolated from fishes of West Bengal**” submitted by **Mr. Abhishek Das**, Registration Number- 0877/Ph.D./Sc. for the degree of **Doctor of Philosophy** in Science (Zoology) of the Vidyasagar University, is a record of original research work carried out under my supervision and guidance.

The results incorporated in the present Thesis have not been submitted either in part or in full for any degree or diploma to this or any other University. Mr. Das had already delivered the Pre-submission Ph.D. Seminar Lecture on 11.1.2019 in the Department of Zoology, Vidyasagar University. All rules and regulations laid down by the University for the fulfillment of requirement for the degree have been followed by him. Plagiarism check certificate provided by the Vidyasagar University, states only 1% significance which is within the permissible limit as per UGC guideline. Also, the revision suggested by the examiners has been incorporated in the Thesis. The work is worthy of consideration for the Award of the degree of Doctor of Philosophy (Science).

I wish him all success.

(Bijay Kumar Behera)

**Dr. Bijay Kumar Behera**

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