## CANDIDATE'S DECLARATION

I. AFTAB ANWAR, hereby, declare that the work which is being presented in this dissertation entitled "Optogenetic Modulation of Neural Activity in Alzheimer's Disease Using Channelrhodopsin-2" submitted in partial fulfillment of the requirements for the award of Degree of M.Sc. (Electronics), to the Department of Applied Sciences and Humanities, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi- 110025, is an authentic record of my own work carried out during the project work under the supervision of Dr. Mukesh Pratap Singh.

I have presented the work/idea in my own words and where ever others ideas or words have been included; I have adequately cited and referenced the original sources. To the best of my knowledge, the matter embodied in this dissertation has not been submitted for the award of any other degree or diploma in any other Institute/University.

I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed. It is further stated that if at any later stage any plagiarism or any material of this dissertation found copied from the other's work/source, I will be solely responsible for that and I will abide by the rules of Intellectual Property Act, Govt. of India.

Date: 10 June 2024

Place: New Delhi

## CERTIFICATE

This is to certify that "AFTAB ANWAR" student of final semester of "MSc (Electronics)" has submitted MAJOR PROJECT REPORT entitled "Optogenetic Modulation of Neural Activity in Alzheimer's Disease Using Channelrhodopsin-2" in partial fulfilment for the requirements of the degree of Master of Science in electronics, Department of Applied Science & Humanities, Faculty of engineering & technology, JAMIA MILLIA ISLAMIA, NEW DELHI, in Session 2022-24. It has been found to be satisfactory and hereby approved for submission.

Drizishan Hussain Khani Khan Head of the Department

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