





आई.सी.एम.आर.- राष्ट्रीय कॉलरा और आंत्र रोग संस्थान **ICMR - NATIONAL INSTITUTE OF CHOLERA AND ENTERIC DISEASES** स्वास्थ्य अनुसंघान विभाग, स्वास्थ्य और परिवार कल्याण मंत्रालय, भारत सरकार Department of Health Research, Ministry of Health and Family Welfare, Govt. of India

December 10, 2021

CERTIFICATE

To Whom It May Concern

This is to certify that the project report entitled "Studying the Apoptotic Effects of a Novel Purified Microbial Metallo-Protease on Human Ovarian Cancer Cells" has been submitted by Mr. Palash Paul, Reg. no: 058-1114-0818-17 of the Department of Microbiology, for the degree of Master of Science in Microbiology from Vijaygarh Jyotish Ray College (affiliated to University of Calcutta), Kolkata. The research work was carried out by him in the Division of Molecular Pathophysiology, ICMR-NICED, under my supervision from August 1, 2021 to December 10, 2021. The results embodied in this report are new and have not been submitted to any other university or institution for the award of any degree or diploma.

He has successfully completed the project work and has been acquainted with several biochemical, molecular biology and cell biology techniques like human cell culture maintenance, flow cytometry, microbial culture methods, western blotting, enzymatic assays, and protein purification by chromatographic methods etc. His performance during this period has been highly satisfactory. He is sincere, responsible and efficient in his working field. I have had the best impression about his scientific enthusiasm and technical background.

> अमित पाल / Dr. Amit Pal एक / Scientist F) ब्रीर स्त्रीत्र रोग संस्थान

I wish him all success in his future endeavours.

Dr. Amit Pal, Ph.D.

Scientist-'F' & Head

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