CERTIFICATE

This is to certify that Mr. Sumit Sudhir Kamat has satisfactory completed the dissertation titled "Isolation and characterization of plant growth promoting bacteria from *Calotropis gigantea*" being submitted to Goa University in partial fulfilment of the requirement for the degree of Master of Science in Microbiology in the academic year 2019-2020.

Signature of Student

Sumit S. Kamat

Signature of Guide

Dr. Trupti Asolkar

Signature of Head of Department

Prof. Sandeep Garg

Isolation and characterization of plant growth promoting bacteria from *Calotropis gigantea*.

THESIS SUBMITTED TO GOA UNIVERSITY PARTIAL FULFILMENT OF THE REQUIREMENT OF MASTER OF SCIENCE IN MICROBIOLOGY

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