



St Xavier's College (Autonomous)  
5, Mahapalika Marg, Mumbai- 400001

**To study the influence of standard TB treatment on Phagocytosis of  
*Mycobacterium tuberculosis* in THP-1 derived macrophages**

A dissertation to St Xavier's College (Autonomous)  
For the partial fulfilment of the degree of Master of Science in Biotechnology

By

Ms. Urjita Manoj Divekar.

MSc. (Biotechnology)

2019-2020

Under the guidance of

Dr. Kalpana Sriraman.

The Foundation for Medical Research, Worli.

**POST GRADUATE DEPARTMENT OF BIOTECHNOLOGY**

St Xavier's College (Autonomous)

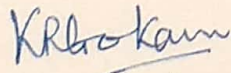
5, Mahapalika Marg, Mumbai- 400001

**CERTIFICATE**

This is to certify that Ms. Urjita Manoj Divekar, student of MSc (Biotechnology) - Semester IV, at the Post Graduate Department of Biotechnology, St. Xavier's College (Autonomous) has submitted the dissertation work titled "**To study the influence of standard TB treatment on Phagocytosis of *Mycobacterium tuberculosis* in THP-1 derived macrophages**" for the partial fulfilment of the Master's degree in Science in Biotechnology, during the academic year 2019-2020.

**Date:**

**Place:**



**Dr. Karuna Gokarn**

**Head of the Department, PGDBT**

POST GRADUATE DEPARTMENT  
OF BIOTECHNOLOGY  
ST. XAVIER'S COLLEGE,  
MUMBAI-400 001

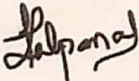
## CERTIFICATE OF INTERNSHIP

This is to certify that **Ms. Urjita Manoj Divekar**, student of MSc (Biotechnology), St. Xavier's College (Autonomous) undertook 3 months (Dec 2019-Feb 2020) of training/ Research Project at The Foundation for Medical Research lab during the academic year 2019-2020.

She has carried out the dissertation work entitled "To study the influence of standard TB treatment on Phagocytosis of *Mycobacterium tuberculosis* in THP-1 derived macrophages" for the partial fulfilment of MSc. (Biotechnology) degree. He /She has been familiarized with the following techniques during this project.

- a) Cell culture
- b) Microscopy
- c) TB culture

PI/supervisor: Dr. Kalpana Sriraman

Signature: 

Date 15/08/2020

Seal of the institute