## **DECLARATION**

## STATEMENT UNDER O.Ph.D.8/ (iii) OF THE M.S. UNIVERSITY OF BARODA, VADODARA, INDIA.

The work presented in this thesis has been carried out by me at The Department of Microbiology and Biotechnology Centre, Faculty of Science, The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat, India under the guidance of Dr. Ratika Srivastava, UGC-Assistant Professor, Department of Biotechnology, School of Life Sciences, Babasaheb Bhimrao Ambedkar University, Lucknow, Uttar Pradesh, India. The data reported here is original and has been derived from the studies undertaken by me.

Place: Vadodara

Date: 03/05/2023

Humayara Khan (Ph.D. Candidate)

This is to certify that the above declaration is true.

Place: Lucknow

Date: 03/05/2023

Dr. Ratika Srivastava (Ph.D. guide)