CERTIFICATE

This is to certify that the present work embodied in the project entitled "Introductory Fractional Calculus" is the own work of Harpreet Kaur, student of M.Sc. (Hons.) Mathematics, Department of Physical Sciences, Sant Baba Bhag Singh University under my supervision towards the partial fulfillment of the award of degree in M.Sc. (Hons.) Mathematics, during the academic year of 2024-2025. This research work has not been submitted earlier to any university/institution for any research degree to the best of my knowledge.

> Supervisor Dr. Anju Sood Associate Professor (Mathematics) Department of Physical Sciences

University Institute of Sciences

Date: 30 June 2025

Place: Jalandhar

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CERTIFICATE

This is to certify that the present work embodied in the project entitled "Differential equation based mathematical models of Marburg virus disease: a systematic review" is the own work of Samriti, student of M.Sc. (Hons.) Mathematics, Department of Physical Sciences, Sant Baba Bhag Singh University under my supervision towards the partial fulfillment of the award of degree in M.Sc. (Hons.) Mathematics, during the academic year of 2024-2025. This research work has not been submitted earlier to any university/institution for any research degree to the best of my knowledge.

Supervisor

Dr. Anju Sood

Associate Professor (Mathematics)

Department of Physical Sciences

Date: 30 June 2025

Place: Jalandhar

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CERTIFICATE

This is to certify that the present work embodied in the project entitled "Finite Difference Approach for Solving ODEs: A Review" is the own work of Parmjot, student of M.Sc. (Hons.) Mathematics, Department of physical sciences, Sant Baba Bhag Singh University under my supervision towards the partial fulfillment of the award of degree in M.Sc. (Hons.) Mathematics, during the academic year of 2023-2025. This research work has not been submitted earlier to university/institution for any research degree to the best of my knowledge.

Date:

Supervisor

Dr. Inderdeep Singh

Associate professor of Mathematics

Department of Physical sciences

Sant Baba Bhag Singh university

Khiala, Jalandhar



SANT BABA BHAG SINGH UNIVERSITY, JALANDHAR

CERTIFICATE

This is to certify the work presented in this project entitled "Comparison Study for Solving Some Applications of Engineering via Sumudu and Laplace Transforms" is the own work of Ms. Jaspreet Kaur, student of M.Sc (Honours) Mathematics conducted in the Department of Physical Sciences, Sant Baba Bhag Singh University, Jalandhar, Punjab under my supervision towards the fulfillment of the degree of M.Sc (Honours) Mathematics during session 2023-2025. To the best my knowledge, no university/institute has previously submitted this material for a degree.

Date: 26/06/2025

Dr.Inderdeep Singh

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Associate Professor of Mathematics

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