SOLUTION OF TWO-POINT BOUNDARY VALUE PROBLEMS USING QUINTIC HERMITE COLLOCATION METHOD

A

THESIS

SUBMITTED TO

MAHARAJA RANJIT SINGH
PUNJAB TECHNICAL UNIVERSITY
BATHINDA, PUNJAB

IN FULFILMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

DOCTOR IN PHILOSOPHY

IN

MATHEMATICS

By

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CANDIDATE'S DECLARATION

I hereby certify that the work which is being presented in the thesis, entitled "Solution of two-point boundary value problems using quintic Hermite collocation method" in fulfilment of the requirements for the award of the degree of Doctor of Philosophy in Faculty of Sciences, Department of Mathematics and submitted in Maharaja Ranjit Singh Punjab Technical University, Bathinda is an authentic record of my work carried out during a period from July 2017 to November 2022 under the supervision of **Dr. Ajay Kumar Mittal**, Depatment of Mathematics, Aryabhata Group of Institutes (AGI), Barnala, Punjab and **Dr. Vijay Kumar Kukreja**, Department of Mathematics, SLIET, Longowal, Punjab. The matter embodied in this thesis has not been submitted by me for the award of any other degree of this or any other University/Institute.

(Satinder Pal Kaur)

This is to certify that the above statement made by the candidate is correct to the best of our knowledge.

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