

CERTIFICATE

This is to certify that the dissertation entitled “**A Study on Bipolar Spherical Neutrosophic Cubic Graphs and its Applications**” submitted to the Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, in partial fulfilment of the requirements for the award of the Degree of **Doctor of Philosophy in Mathematics**, is a record of original research work done by **Akalyadevi, K.**, during the period of her study in the Department of Mathematics at Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, under my supervision and guidance and the thesis has not formed the basis for the award of any Degree / Diploma / Associateship / Fellowship or other similar title of any candidate of any University.

N. Balamani

**Signature of the
Head of the Department**

A. R. S. Daman Ramaswamy

Signature of the Supervisor

G. Padmavathi
25/6/21

Signature of the Dean


Dr. G.PADMAVATHI
M.Sc., M.Phil., Ph.D., MISTE, MCSI
Professor, Department of Computer Science
Avinashilingam Institute for Home Science
and Higher Education for Women - University
Coimbatore - 641 043

DECLARATION

I, **Akalyadevi, K.**, hereby declare that the thesis, entitled "**A Study on Bipolar Spherical Neutrosophic Cubic Graphs and its Applications**" submitted to the Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, in partial fulfilment of the requirements for the award of the Degree of **Doctor of Philosophy in Mathematics** is a record of original and independent research work done by me during the period under the supervision and guidance of **Dr. A. R. Sudamani Ramaswamy, M.Sc., M.Phil., Ph.D.**, Professor, Department of Mathematics, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, and it has not formed the basis for the award of any Degree/ Diploma/Associateship/Fellowship or other similar title of any candidate of any University.



Signature of the Supervisor



Signature of the Candidate