

## CERTIFICATE

This is to certify that the dissertation entitled “**Analysis of Some Generalized Closed Sets Using  $\eta^*$ -Closure Operator**” 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 **PL. Meenakshi**, as a Full time Research Scholar, during the period of her study from July 2018 to November 2020 in the Department of Mathematics at Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, under my supervision and guidance and that this thesis work has not formed the basis for the award of any Degree/ Diploma / Associateship / Fellowship or other similar title to any candidate of this or any other University.

*P. Jeyalaxmi*  
18.11.2020  
Signature of the


**Head of the Department**

*L. Sivakamali*  
18.11.2020  
Signature of the Supervisor

*P. Jeyalaxmi*  
18.11.2020  
Signature of the Dean

## DECLARATION

I, **PL. Meenakshi**, hereby declare that the thesis entitled “**Analysis of Some Generalized Closed Sets Using  $\eta^*$ -Closure Operator**” 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. K. Sivakamasundari, M.Sc., M.Phil., D.H. Ed., Ph.D.**, Professor, Department of Mathematics, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, and it has formed the basis for the award of any Degree/ Diploma/ Associateship/ Fellowship or other similar title to any candidate of this or any other University.

  
18.11.2020  
Signature of the Supervisor

  
18/11/2020  
Signature of the Candidate