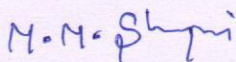


CERTIFICATE

This is to certify that the dissertation entitled “ **A BRIEF STUDY ON COLORING OF COMMUTATIVE RINGS** ” submitted to the Karpagam Academy of Higher Education in partial fulfilment of the requirements for the award of the degree of **Bachelor of Science in Mathematics** is a bona fide record of original research work done by **MALATHI P** during the period 2019 -20 of their study in the Department of Mathematics at Karpagam Academy of Higher Education, Coimbatore, under my supervision and guidance and the dissertation has not formed the basis for the award of any Degree/Diploma/Associate/Fellowship or similar title to any candidate of any University.



Signature of Head of the Department

Dr. M. M. SHANMUGAPRIYA, Ph.D.,
Professor & Head,
Department of Mathematics,
Karpagam Academy of Higher Education,
Coimbatore - 641 021, Tamilnadu, India.



Signature of the Guide

Assistant Professor
Department of Mathematics
Faculty of Arts, Science and Humanities
Karpagam Academy of Higher Education
Coimbatore - 641 021, Tamil Nadu, India.