Preface

The thesis is incorporated with the results on annihilator of fuzzy subsets of rings and modules, essential fuzzy submodules, singular fuzzy ideals and rings with chain condition on fuzzy annihilators. The material presented in this thesis is organized into four chapters, each divided into three or four sections.

In the introductory chapter a background sketch, objective of the work and summary of the results of the subsequent chapters are briefly presented.

Chapter 1 deals with the basic definitions and results available in the standard literatures.

Chapter 2 is devoted to the study of annihilator of fuzzy subsets of rings and modules. Here we have defined annihilator in two ways: using level sets and concepts of residual quotients.

Chapter 3 deals with essential fuzzy submodule of a module. In this chapter closed fuzzy submodules and semisimple fuzzy submodules are also discussed.

Chapter 4 is devoted to the study of singular fuzzy ideals together with singular fuzzy submodules. Some properties of singular fuzzy ideals of a commutative ring with chain condition on fuzzy annihilators are also studied.