

Abstract

Throughout this research all rings are associative with identity and all modules are unitary left R -module.

D.X.Zhou and X.R.Zhang in [5] introduced the concept of small-essential submodule as a proper generalizations of essential submodule where a submodule N of an R -module M is said to be a small-essential submodule in M (denoted by $N \ll_e M$) if for each small submodule X of M such that $N \cap X = 0$, then $X = 0$.

This research consists of four sections. In section one we introduce some basic definitions and properties which we will need them in other sections.

In section two definition of an essential submodule given with its examples and properties.

In section three we study the concept of small submodule with some of its important properties.

In section four some known properties and examples of small-essential submodules are given.