ABSTRACT

CHARACTERIZATION OF INJECTIVE MODULES

Ülkü Rabia KUŞ

M.Sc. Thesis, Department of Mathematics Supervisor: Assoc. Prof. Dr. Semra DOĞRUÖZ 2015, 51 pages

Injective modules take important place in the development of module theory. The theory of injective modules being developed by different definitions and thus researchers make a lot of generalizations of injective modules. In this thesis, we study some different generalizations of injective modules in the sense of characterizations. Therefore A-injective, principally injective, quasi-injective, pseudo-injective, f-injective, PP-M-injective, small PPQ-injective and SP-M-injective modules has been studied and equivalent conditions has been examined for characterizations. Finally, the relations of this injective modules has been given for further characterizations.

Key Words

Injective module, essential submodule, singular submodule, Baer's Criterion