

Abstract

All rings have identity elements and all modules are unital right modules, unless stated otherwise.

Let R be a ring and M be an R -module. About thirty years ago, M.Harda and B.Muller introduced the concept of extending module, where an R -module is called extending (CS) if every closed submodule of M is a direct summand. CS-modules have been studied by several authors such as N.V.Dung, D.V.Huyn, P.F.Smith and R.Wisbauer [4], Saad.H.Mohamed and B.J.Muller [5]. Many authors investigated extending relative to certain class of modules. Beside this, many generalizations of CS-modules are introduced.

This research consists of three sections. In section one we introduce some basic definitions, concepts and properties which we will need them in second and third sections.

In section two definitions of essential and closed submodules are given with their examples and properties.

In section three we study the concept of extending modules with some of its important properties.