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ABSTRACT

MODULES CHARACTERIZED WITH SOME SPECIAL SUBMODULES

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For an associative ring R with identity, let M be a right R-module. If every complement submodule of M is a direct summand of M, then M is called *CS-module*. Extending module, *CS*-module and a module which satisfy C_1 property are all equivalent. But in the development of the theory, there are several different definitions of this kind of modules which are not equal. The modules characterized by their closed submodules had been work by some researchers and also published as a survey (See [12]). In this work we study all different definitions that we access them in the sense of *CS*-modules characterized by complement submodules and give relations among them.

Key Words : Complement submodule, closed submodule, extending submodule, CS-module, singular submodule, classes of modules.