ABSTRACT

FINITELY GENERATED SUPPLEMENTED MODULES

By

NAFISAH

Let M R-modul. N, L are submodules of M R-modul and X be a generating set of M. If X be a finitely set, then M is finitely generated modules. N is called supplement of L in M if N is minimal in the set of submodules $\{K \subset M | L + K = M\}$, $L + N = M$ and $L \cap N \ll M$. Supplemented modules is module that every submodule has supplement. In this research, we describe characterization of finitely generated supplemented modules. M is supplemented module if and only if every maximal submodule of M has a supplement in M, M is supplemented module if and only if M is *sum of hollow* submodules, and M is supplemented module if and only if M is an *irredundant* (finite) *sum of local* submodules.

Keywords : *module, finitely generator, supplemented modules.*