

ON GENERALIZED DEDEKIND MODULES OVER GENERALIZED DEDEKIND DOMAIN

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We introduce the notion of G-Dedekind modules, as the generalization of Dedekind modules. A module M is called a generalized Dedekind module (a G-Dedekind module for short) if any v -submodule of M is invertible. Let D be a Noetherian G-Dedekind domain and M a G-Dedekind D -module. We denote as $M[x]$ the polynomial $D[x]$ -module in an indeterminate x and $K(x)$ the quotient field of $K[x]$, which is the quotient ring of $D[x]$. We show that $M[x]$ is also a G-Dedekind $D[x]$ -module.

Keywords : G-Dedekind modules, G-Dedekind domains, polynomial modules, invertible submodules.

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