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***QTAG torsionfree modules***

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**Abstract:** The structure theory of abelian  $p$ -groups does not depend on the properties of the ring of integers, in general. The substantial portion of this theory is based on the fact that a finitely generated  $p$ -group is a direct sum of cyclics. Given a hereditary torsion theory on the category  $R\text{-Mod}$  of unitary left  $R$ -modules we can investigate torsionfree modules having the corresponding property for all torsionfree factor-modules (and a natural requirement concerning extensions of some homomorphisms). This paper continues in our previous investigations of the structural properties of such modules.

**Keywords:** torsion theory, torsionfree module,  $\sigma$ -QTAG-module, kernel of purity, center of purity

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