

ISOMORPHISM OF COMMUTATIVE GROUP ALGEBRAS OF FINITE ABELIAN GROUPS

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ABSTRACT

Let a commutative ring R be a direct product of indecomposable rings with identity and let G be a finite abelian p -group. In the present paper we give a complete system of invariants of the group algebra RG of G over R when p is an invertible element in R .

These investigations extend some classical results of Berman (1953 and 1958), Sehgal (1970) and Karpilovsky (1984) as well as a result of Mollov (1986).

Keywords: Commutative semisimple group algebras, Finite abelian p -groups, Direct product of indecomposable rings

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