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ISOMORPHISM THEOREMS ON QUASI MODULE

SANDIP JANA

Department of Pure Mathematics University of Calcutta 35, Ballygaunge Circular Road, Kolkata-700019, India e-mail: sjpm@caluniv.ac.in

AND

Supriyo Mazumder

Department of Mathematics Adamas University Barasat – Barrackpore Road, Jagannathpur, Kolkata, India **e-mail:** supriyo88@gmail.com

Abstract

A quasimodel is an algebraic axiomatisation of the hyperspace structure based on a module. We initiated this structure in our paper [2]. It is a generalisation of the module structure in the sense that every module can be embedded into a quasi module and every quasi module contains a module. The structure a quasimodel is a conglomeration of a commutative semigroup with an external ring multiplication and a compatible partial order. In the entire structure partial order has an intrinsic effect and plays a key role in any development of the theory of quasi module. In the present paper we have discussed order-morphism which is a morphism like concept. Also with the help of the quotient structure of a quasi module by means of a suitable compatible congruence, we have proved order-isomorphism theorem.

Keywords: module, quasi module, order-morphism, congruence, quotient. 2010 Mathematics Subject Classification: 08A99, 13C99, 06F99.

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