

ON k -RADICALS OF GREEN'S RELATIONS IN SEMIRINGS WITH A SEMILATTICE ADDITIVE REDUCT

TAPAS KUMAR MONDAL¹

Department of Mathematics

Dr. Bhupendra Nath Dutta Smriti Mahavidyalaya

Hatgobindapur, Burdwan – 713407

West Bengal, India

e-mail: tapumondal@gmail.com

AND

ANJAN KUMAR BHUNIYA

Department of Mathematics

Visva-Bharati, Santiniketan

Bolpur – 731235, West Bengal, India

e-mail: anjankbhuniya@gmail.com

Abstract

We introduce the k -radicals of Green's relations in semirings with a semi-lattice additive reduct, introduce the notion of left k -regular (right k -regular) semirings and characterize these semirings by k -radicals of Green's relations. We also characterize the semirings which are distributive lattices of left k -simple subsemirings by k -radicals of Green's relations.

Keywords: k -radicals of Green's relations, left k -regular semiring, left k -simple semiring, distributive lattices of left k -simple semirings.

2010 Mathematics Subject Classification: 16Y60.

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¹Supported by University Grants Commission(ERO), India, for Minor Research Project No. F. PSW-120/11-12(ERO).

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Received 4 February 2013

Revised 26 February 2013