

ON QUASI-P-ALMOST DISTRIBUTIVE LATTICES

RAVI KUMAR BANDARU¹

Department of Mathematics
GITAM (Deemed to be University)
Hyderabad Campus, Telangana, India-502 329

e-mail: ravimaths83@gmail.com

AND

G.C. RAO

Department of Mathematics
Andhra University
Andhra Pradesh, India-530 003

e-mail: gcraomaths@yahoo.co.in

Abstract

In this paper, the concept of quasi pseudo-complementation on an Almost Distributive Lattice (ADL) as a generalization of pseudo-complementation on an ADL is introduced and its properties are studied. Necessary and sufficient conditions for a quasi pseudo-complemented ADL(q-p-ADL) to be a pseudo-complemented ADL(p-ADL) and Stone ADL are derived and the set $S(L) = \{a^* \mid a \in L\}$ is proved to be a Boolean algebra. Also, the notions of $*$ -congruence and kernel ideals are introduced in a quasi-p-ADL and characterized kernel ideals. Finally, some equivalent conditions are given for every ideal of a quasi-p-ADL to be a kernel ideal.

Keywords: pseudo-complementation, quasi pseudo-complementation, Almost Distributive Lattice (ADL), p-ADL, quasi-p-ADL.

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¹Corresponding author.

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