$\mathcal{N}$ -PRIME SPECTRUM OF STONE ALMOST DISTRIBUTIVE LATTICES

N. RAFI^{1,*}, RAVI KUMAR BANDARU²

AND

M. SRUJANA¹

¹*Department of Mathematics, Bapatla Engineering College
Bapatla, Andhra Pradesh, India-522 101*

²*Department of Mathematics
GITAM (Deemed to be University)
Hyderabad Campus, Telangana 502 329, India*

e-mail: rafimaths@gmail.com
ravimaths83@gmail.com
srujana.maths@gmail.com

Abstract

Introduced the notions of annulets and $\mathcal{N}$ -filters in stone Almost Distributive Lattices and investigated their properties. Utilized annulets to characterize the $\mathcal{N}$ -filters. Derived that every proper $\mathcal{N}$ -filter is the intersection of all $\mathcal{N}$ -prime filters containing it and also proved that the set $\mathcal{F}_{\mathcal{N}}(L)$ of all $\mathcal{N}$ -filters is isomorphic to the class $Con_E(L)$ of all G -extensions of L . Given some topological properties of the space of all $\mathcal{N}$ -prime filters. Derived a necessary and sufficient condition for the space of all $\mathcal{N}$ -prime filters to be a Hausdorff space.

Keywords: Almost Distributive Lattice (ADL), stone ADL, ideal, filter, annulet, $\mathcal{N}$ -filters, isomorphism, compact set, Hausdorff space.

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*Corresponding author.

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