Relationship Between Filters

Priyanka Singh[1], Amitabh Banerjee[2], Purushotam Jha[3]

[1]Department of Engineering ITM University, Raipur India
[2]Department of Mathematics Govt. D.B.Girls College, Raipur India
[3]Department of Mathematics Govt. J.Y.C.G.College, Raipur India

[1]Email: singhpriyanka2107@gmail.com
[2]Email: amitabh61@yahoo.com
[3]Email: purushjah@gmail.com

Abstract

In this paper we investigate the relationship between filters such as Positive Filter (PF), Associative Filter(AF), Fantastic Filter (FF), and Fuzzy Implicative Filter(FIF) in a lattice implication algebra. Moreover we investigate a filter F of L is (i) $FF \Leftrightarrow F$, (ii)$PF \Leftrightarrow F$, (iii)$AF \Leftrightarrow F$, (iv)$PF \Leftrightarrow FF$, (v)$AF \Leftrightarrow PF$, (vi)$AF \Leftrightarrow FF$.

Keywords: Lattice implication algebra, Filter, Implicative filter, Positive fillter, Fantastic filter and associative fillter.

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