

## Isomorphisms of Some Lattices Obtained from Morita Context of Semigroups Using Fuzzy Notions

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Received 7 August 2018

Accepted 26 December 2018

Communicated by K.P. Shum

**AMS Mathematics Subject Classification(2000):** 20M30, 20M50, 06F05

**Abstract.** There are four algebraic structures in a Morita context  $\langle S, T, {}_S P_T, {}_T Q_S, \theta, \phi \rangle$ , two semigroups  $S, T$  and two bioperands  $P, Q$ . There is nice interplay among these components which is evident from the study accomplished by Laan et al. [11], Gupta et al. [8] and Sardar et al. [18]. Among other things, connection between different types of lattices of various pairs of components of a Morita context have been obtained in those papers. The main purpose of this paper is to use fuzzy notions in order to explore some more interplays among the different components of a Morita context of semigroups. In this endeavour we have obtained various types of lattices