## Permeable values and energetic sets in BCK/BCI-algebras

Young Bae Jun

Department of Mathematics Education, Gyeongsang National University, Jinju 52828, Korea; skywine@gmail.com

**Abstract:** The notions of  $(\in, \in \lor q)$ -permeable S-value and  $(\in, \in \lor q)$ -permeable I-value are introduced, and related properties are investigated. Relations among  $(\in, \in \lor q)$ -fuzzy subalgebra,  $(\in, \in \lor q)$ -fuzzy ideal, (strong) lower and (strong) upper level sets,  $(\in, \in \lor q)$ -permeable S-value,  $(\in, \in \lor q)$ -permeable I-value, S-energetic set, I-energetic set, right stable set and right vanished set are discussed.

## Keywords:

 $(\in, \in \lor q)$ -permeable S-value;  $(\in, \in \lor q)$ -permeable I-value; S-energetic set; I-energetic set.

2010 Mathematics Subject Classification. 06F35, 03G25, 08A72.