ABSTRAK

Suatu matriks kabur intuitionistik (IFM) A berorder $m \times n$ disebut regular jika terdapat IFM X berorder $n \times m$ yang juga suatu IFM sedemikian sehingga $AXA = A$. Suatu IFM X yang memenuhi relasi $AXA = A$ disebut invers generalis (g-invers) dari A yang dinotasikan dengan A^-. Jika $A^-A = A^-B$ dan $AA^- = BA^-$ maka $A \leq B$ (minus ordering) sedangkan jika A dan X memenuhi persamaan-persaman $AXA = A$, $XAX = X$, $(AX)^T = AX$, dan $(XA)^T = XA$ maka X disebut invers Moore Penrose dari A dan dinotasikan dengan A^+. Jika $A \leq B$ maka ekuivalen dengan $A = AA^-B = BA^-A = BA^-B$. Suatu minus ordering "$\leq$" adalah parsial ordering. Jika matriks A invertible maka $A^+ = A^-$, sedemikian sehingga $A \leq B$ juga ekuivalen dengan $A^+A = A^+B$ dan $AA^+ = BA^+$

Kata kunci : matriks kabur intuitionistik, g-invers, minus ordering, invers Moore Penrose, parsial ordering.

ABSTRACT

An Intuitionistic Fuzzy Matrix (IFM) A of order $m \times n$ is said to be regular if there exists X which is also an IFM such that $AXA = A$. An IFM X satisfies the relation $AXA = A$ is called a generallised inverse (g-inverse) of A which is denoted by A^-. If $A^-A = A^-B$ and $AA^- = BA^-$ then we say $A \leq B$ (minus ordering) while if A and X satisfies the equations $AXA = A$, $XAX = X$, $(AX)^T = AX$, and $(XA)^T = XA$ then X is called Moore Penrose Inverse of A which is denoted by A^+. If $A \leq B$ then it is equivalent with $A = AA^-B = BA^-A = BA^-B$. The minus ordering $\leq$ is a partial ordering. If A is invertible matrix then $A^+ = A^-$ such that $A \leq B$ is also equivalent with $A^+A = A^+B$ and $AA^+ = BA^+$.

Keywords: intuitionistic fuzzy matric (IFM), generalized inverse (g-invers), minus ordering, Moore Penrose inverse, partial ordering.