

ABSTRAK

Suatu graf fuzzy *intuitionistic* (α, β) terdiri dari pasangan himpunan titik V dan himpunan sisi E dengan jumlah derajat keanggotaan dan bukan keanggotaan setiap titik dan setiap sisi dalam selang tertutup $[0,1]$. Himpunan semua morfisma *intuitionistic* dari graf fuzzy *intuitionistic* adalah monoid. Suatu himpunan fuzzy *intuitionistic* dari himpunan semua morfisma *intuitionistic* adalah subsemigrup fuzzy *intuitionistic* jika derajat keanggotaan titik morfisma *intuitionistic* sama dengan supremum derajat keanggotaan sisi-sisi morfisma *intuitionistic* dan derajat bukan keanggotaan titik morfisma *intuitionistic* sama dengan infimum derajat bukan keanggotaan sisi-sisi morfisma *intuitionistic*. Himpunan semua automorfisma *intuitionistic* dari graf fuzzy *intuitionistic* adalah grup. Suatu himpunan fuzzy *intuitionistic* dari himpunan semua automorfisma *intuitionistic* adalah subgrup fuzzy *intuitionistic* jika derajat keanggotaan titik automorfisma *intuitionistic* sama dengan supremum derajat keanggotaan sisi-sisi automorfisma *intuitionistic*, derajat bukan keanggotaan titik automorfisma *intuitionistic* sama dengan infimum derajat bukan keanggotaan sisi-sisi automorfisma *intuitionistic* dan juga subgrup fuzzy *intuitionistic* sama dengan inversnya.

Kata kunci : *Graf Fuzzy Intuitionistic, Morfisma Intuitionistic, Automorfisma Intuitionistic.*

ABSTRACT

An intuitionistic fuzzy graph (α, β) consist of a couples of node sets V and set of edges E which the sum of degree membership and degree non membership each of nodes and each of edges in closed interval $[0,1]$. The set of all intuitionistic morphism from intuitionistic fuzzy graph is a monoid. The intuitionistic fuzzy set from set of all intuitionistic morphism is an intuitionistic fuzzy subsemigroup if degree membership of intuitionistic morphism node is equal with the supremum degree membership of intuitionistic morphism edges and degree non membership of intuitionistic morphism node is equal with the infimum degree non membership of intuitionistic morphism edges. The set of all intuitionistic automorphism from intuitionistic fuzzy graph is a group. The intuitionistic fuzzy set from set of all intuitionistic automorphism is a intuitionistic fuzzy subgroup if degree membership of intuitionistic automorphism node is equal with the supremum degree membership of intuitionistic automorphism edges, degree non membership of intuitionistic automorphism node is equal with the infimum degree non membership of intuitionistic automorphism edges and also intuitionistic fuzzy subgroup is equal with the invers.

Keywords : *Intuitionistic Fuzzy Graph, Intuitionistic Morphism, Intuitionistic Automorphism.*