

## BAB IV

### KESIMPULAN

Berdasarkan pembahasan yang telah dilakukan maka dapat disimpulkan bahwa himpunan lembut kabur intuisionistik bernilai interval ialah penggabungan dari himpunan kabur intuisionistik bernilai interval dengan himpunan lembut.

Pada koleksi dari himpunan lembut kabur intuisionistik bernilai interval, didefinisikan beberapa operasi biner seperti: gabungan atau irisan antara dua atau lebih himpunan lembut kabur intuisionistik bernilai interval. Dari definisi tersebut diperoleh sifat-sifat asosiatif dan distributif. Selain itu, juga didefinisikan beberapa operator yakni necessity, possibility, serta necessity dan possibility. Dari beberapa operator itu diperoleh juga beberapa sifat yaitu mempertahankan operasi gabungan dan irisan.

Jika  $\langle F, A \rangle$ ,  $\langle G, B \rangle$  dan  $\langle H, C \rangle$  adalah himpunan lembut kabur intuisionistik bernilai interval, maka akan memenuhi operasi dan sifat-sifat berikut

:

$$(1) (\langle F, A \rangle \wedge \langle G, B \rangle)^C = \langle F, A \rangle^C \vee \langle G, B \rangle^C,$$

$$(2) (\langle F, A \rangle \vee \langle G, B \rangle)^C = \langle F, A \rangle^C \wedge \langle G, B \rangle^C.$$

$$(3) \langle F, A \rangle \wedge (\langle G, B \rangle \wedge \langle H, C \rangle) = (\langle F, A \rangle \wedge \langle G, B \rangle) \wedge \langle H, C \rangle;$$

$$(4) \langle F, A \rangle \vee (\langle G, B \rangle \vee \langle H, C \rangle) = (\langle F, A \rangle \vee \langle G, B \rangle) \vee \langle H, C \rangle.$$

$$(5) \langle F, A \rangle \uplus \langle F, A \rangle = \langle F, A \rangle$$

$$(6) \langle F, A \rangle \cap \langle F, A \rangle = \langle F, A \rangle$$

$$(7) \langle F, E \rangle \uplus \Phi = \langle F, E \rangle$$

$$(8) \langle F, E \rangle \cap \Phi = \Phi$$

$$(9) \langle F, E \rangle \uplus \Sigma = \Sigma$$

$$(10) \langle F, E \rangle \cap \Sigma = \langle F, E \rangle$$

$$(11) (\langle F, A \rangle \uplus \langle G, B \rangle)^C = \langle F, A \rangle^C \cap \langle G, B \rangle^C$$

$$(12) (\langle F, A \rangle \cap \langle G, B \rangle)^C = \langle F, A \rangle^C \uplus \langle G, B \rangle^C$$

$$(13) \langle F, A \rangle \cap (\langle G, B \rangle \cap \langle H, C \rangle) = (\langle F, A \rangle \cap \langle G, B \rangle) \cap \langle H, C \rangle$$

$$(14) \langle F, A \rangle \uplus (\langle G, B \rangle \uplus \langle H, C \rangle) = (\langle F, A \rangle \uplus \langle G, B \rangle) \uplus \langle H, C \rangle$$

$$(15) \Box (\langle F, A \rangle \uplus \langle G, B \rangle) = \Box \langle F, A \rangle \uplus \Box \langle G, B \rangle;$$

$$(16) \Box (\langle F, A \rangle \cap \langle G, B \rangle) = \Box \langle F, A \rangle \cap \Box \langle G, B \rangle;$$

$$(17) \Box \Box (\langle F, A \rangle) = \Box \langle F, A \rangle.$$

$$(18) \Diamond (\langle F, A \rangle \uplus \langle G, B \rangle) = \Diamond \langle F, A \rangle \uplus \Diamond \langle G, B \rangle;$$

$$(19) \Diamond (\langle F, A \rangle \cap \langle G, B \rangle) = \Diamond \langle F, A \rangle \cap \Diamond \langle G, B \rangle;$$

$$(20) \Diamond \Diamond (\langle F, A \rangle) = \Diamond \langle F, A \rangle.$$

$$(21) \Delta (\langle F, A \rangle \uplus \langle G, B \rangle) = \Delta \langle F, A \rangle \uplus \Delta \langle G, B \rangle;$$

$$(22) \Delta (\langle F, A \rangle \cap \langle G, B \rangle) = \Delta \langle F, A \rangle \cap \Delta \langle G, B \rangle;$$



$$(23) \triangle \triangle (\langle F, A \rangle = \langle F, A \rangle).$$

$$(24) \Box \langle F, A \rangle \in \langle F, A \rangle \in \Diamond \langle F, A \rangle$$

$$(25) \Diamond \Box \langle F, A \rangle = \Box \langle F, A \rangle$$

$$(26) \Box \Diamond \langle F, A \rangle = \Diamond \langle F, A \rangle$$

$$(27) \Box (\langle F, A \rangle \wedge \langle G, B \rangle) = \Box \langle F, A \rangle \wedge \Box \langle G, B \rangle$$

$$(28) \Box (\langle F, A \rangle \vee \langle G, B \rangle) = \Box \langle F, A \rangle \vee \Box \langle G, B \rangle$$

$$(29) \Diamond (\langle F, A \rangle \wedge \langle G, B \rangle) = \Diamond \langle F, A \rangle \wedge \Box \langle G, B \rangle$$

$$(30) \Diamond (\langle F, A \rangle \vee \langle G, B \rangle) = \Diamond \langle F, A \rangle \vee \Box \langle G, B \rangle$$

$$(31) \triangle (\langle F, A \rangle \wedge \langle G, B \rangle) = \triangle \langle F, A \rangle \wedge \triangle \langle G, B \rangle$$

$$(32) \triangle (\langle F, A \rangle \vee \langle G, B \rangle) = \triangle \langle F, A \rangle \vee \triangle \langle G, B \rangle$$

