
Summary and Conclusion

Throughout the research work the concepts of intuitionistic fuzzy γ generalized closed sets are introduced and studied is compared with the already existing intuitionistic fuzzy closed sets in intuitionistic fuzzy topological spaces. Also intuitionistic fuzzy γ generalized open sets, theoretical applications and intuitionistic fuzzy γ generalized continuous mappings, intuitionistic fuzzy γ generalized irresolute mappings, intuitionistic fuzzy contra γ generalized continuous mappings, intuitionistic fuzzy contra γ generalized M -irresolute mappings, intuitionistic fuzzy almost γ generalized continuous mappings and intuitionistic fuzzy almost contra γ generalized continuous mappings are developed. Many properties and characterizations of the newly defined continuous mappings are obtained. The notion of intuitionistic fuzzy completely γ generalized continuous mappings are discussed.

The comparative study of intuitionistic fuzzy γ generalized closed mappings, intuitionistic fuzzy contra γ generalized open mappings, intuitionistic fuzzy almost γ generalized closed mappings with various already existing intuitionistic fuzzy closed mappings has been executed. Throughout the thesis, the reverse implications which do not hold good are substantiated by suitable examples.

The compositions of two intuitionistic fuzzy γ generalized continuous mappings and the compositions of two intuitionistic fuzzy γ generalized closed mappings are not intuitionistic fuzzy γ generalized continuous mappings and intuitionistic fuzzy γ generalized closed mappings respectively. But after changing the conditions in different ways continuity of mappings is preserved under composition.

The notion of intuitionistic fuzzy γ generalized homeomorphism and intuitionistic fuzzy M - γ generalized homeomorphism are investigated. The interrelations between intuitionistic fuzzy γ generalized homeomorphism with other already existing homeomorphisms have been obtained.

Two new connected spaces called intuitionistic fuzzy γ generalized connected space and intuitionistic fuzzy γ generalized super connected space are discussed and their properties are investigated.

The future research directions based on this research work may be extended as follows:

1. The notion of intuitionistic fuzzy γ generalized closed sets can be extended to bitopological spaces, supra topological spaces and nano topological spaces.
2. The theoretical developments studied in this thesis may be focused on the applications in medical diagnosis, sales analysis, new product marketing, financial services.
3. Various types of intuitionistic fuzzy γ generalized continuous mappings can be studied for separation axioms, compactness in intuitionistic fuzzy topological spaces.