# A REVIEW ON AMBIGUOUS SET THEORY

# Pawan Kumar Singh\*

\*Department of Statistics, Central University of Rajasthan, Ajmer, Rajasthan, INDIA Email id: pawansinghupc@gmail.com; **DOI:10.5958/2278-4853.2023.00149.0** 

# ABSTRACT

Lately, the accurate assessment of uncertainty in data featuring fuzzy attributes has become a significant challenge. To address this, various frameworks such as fuzzy sets and intuitionistic fuzzy sets theory have been extensively proposed. A particular challenge arises when computing the complement of true or false membership values, especially in situations involving indeterminacy. In response to this, the concept of ambiguous set (AS) has emerged as a recent addition. The discussion includes a real-world example that demonstrates how dealing with unconsciousness and ambiguity in human perception motivated the development of ambiguous set theory. Ultimately, the study delves into the definition of ambiguous sets, their mathematical representation, and associated concepts.

### **KEYWORDS:***Fuzzy Set; Intuitionistic Fuzzy Set; Ambiguous Set; Uncertainty.*

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