Critical Path Problem Through Intuitionistic Triskaidecagonal Fuzzy Number Using Two Different Algorithms

N. Jose Parvin Praveena, C. Sagaya Nathan Stalin, and A. Rajkumar

Abstract This paper deals to find critical path through Intuitionistic Triskaidecagonal fuzzy numbers and Triskaidecagonal fuzzy numbers by two distinct methods. The formulae for α-cut ranking method and Euclidean-ranking method are derived. The Triskaidecagonal fuzzy numbers are defuzzied by the magnitude measure which is derived in this paper.

Keywords Triskaidecagonal fuzzy number · Intuitionistic triskaidecagonal fuzzy number · Critical path · Magnitude measure · α-cut ranking · Euclidean ranking

1 Introduction

In numerous genuine cases, the choice on information human judgments with inclinations is regularly unclear, so the customary methods for utilizing fresh qualities are lacking additionally utilizing fuzzy numbers, for example, triangular and trapezoidal are not appropriate in where the vulnerabilities emerge in thirteen distinct focuses in such cases the Triskaidecagonal fuzzy number can be utilized to tackle the issues [1]. In 2015, decagonal and dodecagonal have been produced. It has been additionally stretched out into Triskaidecagonal fuzzy number. Triskaidecagonal, another type of fuzzy number, has been inspected under unverifiable etymological condition which would be less difficult to represent with Triskaidecagonal fuzzy semantic-scale esteems [2]. Alpha-cut strategy is the standard technique that performs diverse number juggling activities including expansion, subtraction, increase and division. Accordingly, Triskaidecagonal, another type of fuzzy number, had been inspected under semantic-scale esteems in which number-crunching task is to be performed

N. Jose Parvin Praveena (✉)
St. Joseph's College of Engineering, Semmenchery, Chennai 600119, India
e-mail: jose301020030@gmail.com

C. Sagaya Nathan Stalin
Hindustan Institute of Technology and Science, Loyola College, Vettavalam, India

C. Sagaya Nathan Stalin · A. Rajkumar
Hindustan Institute of Technology and Science, Chennai 603103, India