

## NEW SOFT GENERALIZED ISOMETRIES WITH SOFT POINTS

**Sandeep Kumawat, Vandana Gupta\* and Anjali Srivastava**

School of Studies in Mathematics,  
Vikram University, Ujjain (M.P.), INDIA

E-mail : sandeepkumawat780@gmail.com

\*Government Kalidas Girl's College, Ujjain (M.P.), INDIA

**(Received: Jun. 01, 2024 Accepted: Jun. 28, 2024 Published: Jun. 30, 2024)**

**Abstract:** Guzide Senel first time introduced the concept of soft distance functions between two soft points in soft metric spaces. Motivated by the study of Senel on soft metric spaces, we have define the new definition of soft isometries with soft points and to investigate some important prepositions on soft isometries. Moreover, we also introduce the examples depend on soft isometries. We hope that this result will provide a good and fruitful results for beginners and also help for some new results for researcher in the field of soft isometric spaces.

**Keywords and Phrases:** Soft set, soft point, soft isometric, soft metric spaces soft distance injective function, surjective function, bijective function and so on.

**2020 Mathematics Subject Classification:** 28C15, 03E75, 03E72.

### 1. Introduction and Definitions

Soft set theory is given a general framework for solving problems of unpredictable data. And in many field the complexity of unpredictable data is available like environment, engineering, economics, science, social science etc. To solve all these type of problem in 1999, Molodtsov [6] introduced the most useful tools for dealing with uncertainties. They gave the basic notations of theory of soft set to present the first result of soft set theory and to discuss some problems of the future and find some new results on fuzzy sets and soft set. Soft Sets represent a powerful tool for decision making about information systems, data mining and drawing conclusions from data, especially in those cases where some uncertainty exists in the