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ON I-STATISTICAL CONVERGENCE IN G-METRIC SPACES

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Abstract: This paper deals with the introduction of the concept of ideal convergence of sequences in generalized metric spaces. Since the investigation in the G-metric space deals with two sequences, so the ideal considered is that of $N \ge N$. We have investigated some basic properties of the introduced notion.

Keywords and Phrases: Ideal, G-metric space, I-Cauchy.

2020 Mathematics Subject Classification: 40A05, 40A35, 46E30.

1. Introduction

In this section, we present some basic definitions and results on I-convergence, statistical I-convergence in G-metric spaces. The concept of statistical convergence was introduced in the year 1951 by Fast [6] and Steinhaus [17] independently and established a relation with summability. It was further investigated from sequence space point of view by Fridy [7], Salat [18], and many others. Applications of statistical convergence in number theory and mathematical analysis can be found in the works due to [1, 3, 5, 6, 7, 13, 14, 17, 18, 19, 20].