

Abstract

In the year 1999, Molodtsov initiated the theory of soft sets as a new mathematical tool for dealing with uncertainties. He has shown several applications in solving many practical problems in economics, engineering, social science, medical science, etc. Research works in soft set theory and its applications in various fields have been progressing rapidly. Soft set theory has a rich potential for application in many directions. Some of which are reported by Molodtsov in his work. He successfully applied soft set theory in areas such as the smoothness of functions, game theory, operation research, Riemann integration and so on. Later, other researchers presented some new definitions on soft sets such as a subset, the complement of a soft set and discussed in detail the application of soft set theory in decision making problems. Also, an attempt was made to assess sound quality based on a soft set approach.

This report consists of two chapters. In chapter one, we introduce the preliminary concepts of soft set such as equality of two soft sets, subset, complement of a soft set, null soft set with examples and some operations on soft sets. In chapter two, a notion of 'soft point' is given and some basic properties of soft points have been studied. Also, the definition of soft metric is given and some properties of soft metrics have been investigated

in details with examples and counter examples.