ABSTRACT

Most of our traditional tools for formal modeling, reasoning, and computing are exact, deterministic, and precise in character. However, there are many complicated problems in economics, engineering, environment, social science, medical science, etc., that involve data which are not always all crisp. We cannot successfully use classical methods because of various types of uncertainties present in these problems. Soft set theory has a rich potential for application in many directions, some of which some of which are reported by Molodtsov in his work [2]. He successfully applied soft set theory in areas such as the smoothness of functions, game theory, operation research, Riemann integration and so on. Presently, work on the soft set theory is making progress rapidly. In the situation standard soft set theory, be а may complex in the real world because of the fuzzy nature of the parameters.

This research 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, we study soft set relations on soft sets such as equivalence relations, composition of relations, partition and function to the framework of soft sets.