

## PREFACE

The Present dissertation entitled " Some Fixed Point Theorems In Hilbert And Generalized Hilbert Spaces" consists of four chapters.

The introductory Chapter-I is divided into four parts. Part-I deals with some basic concepts, iteration methods in normed spaces and Hilbert spaces. In Part-II the development and importance of fixed point theory are discussed. Some preliminaries in generalized Hilbert space are listed in Part-III whereas Part-IV is devoted to motivation of the work.

By using the generalization of Ishikawa iteration scheme, a theorem on common fixed points of a family of generalized contraction mappings has been established in Chapter-II.

In Chapter-III, the results concerning convexity of fixed point set and demiclosedness of generalized contraction mapping in generalized Hilbert space are proved. Further a theorem regarding the construction of fixed points for generalized nonexpansive mapping in generalized Hilbert space is proved.

In the last Chapter-IV, some fixed point theorems for reasonable wanderer and asymptotically regular maps are proved by considering strictly pseudocontractive mappings in generalized Hilbert space. Further these results are generalized by considering generalized contraction mappings in generalized Hilbert space.