ORGANIZATION OF THE THESIS

This thesis has been organized into seven chapters, each consisting of several subsections.

CHAPTER- 1: Introduction, Literature Review and Basic Concepts.

CHAPTER- 2: Neutrosophic Semi Continuous and Almost Continuous Mapping.

CHAPTER- 3: Neutrosophic Bitopological Group.

CHAPTER- 4: Neutrosophic Almost Bitopological Group.

CHAPTER- 5: Plithogenic Neutrosophic Hypersoft Almost Topological Group.

CHAPTER- 6: Neutrosophic Multi Topological Group.

CHAPTER- 7: Summary of the chapters.

Now a brief discussion of our research topics is as follows:

CHAPTER- 1: It is an introductory chapter that presents some basic concepts of neutrosophic set theory and neutrosophic topology and their importance. Also in this chapter, a literature survey of the various approaches, such as neutrosophic set, neutrosophic topology, neutrosophic interior, and neutrosophic closure, is discussed.

CHAPTER- 2: This chapter shows the importance of continuous mapping, semi-continuous mapping, and almost continuous mapping to study topological groups and almost topological groups. For that, the properties of the neutrosophic semi-open set, neutrosophic semi-closed set, neutrosophic regularly open set, neutrosophic regularly closed set, neutrosophic semi-continuous, and neutrosophic almost continuous mapping are studied.

CHAPTER- 3: In this chapter, neutrosophic bitopological group is introduced and discuss their properties in neutrosophic bitopological groups.

CHAPTER- 4: In this chapter, to study the neutrosophic almost bitopological group, the definitions of the neutrosophic semi-open set, neutrosophic semi-closed set, neutrosophic regularly open set, and neutrosophic regularly closed set are introduced, and some of their properties are proved.

CHAPTER- 5: This chapter covers the concept of the neutrosophic hypersoft topological group. Next, some definitions related to the neutrosophic hypersoft topological group are introduced, and studied the plithogenic neutrosophic hypersoft almost topological group and some related propositions.

CHAPTER- 6: This chapter is about studying some properties of the neutrosophic multi topological group. The definitions of neutrosophic multi semi-open, neutrosophic multi semi-closed, neutrosophic multi regularly open set, neutrosophic multi regularly closed set, and neutrosophic multi continuous mapping are introduced and then studied the definition of a neutrosophic multi topological group and some of their properties. Also, since the concept of the almost topological group is very new, the definition of the neutrosophic multi almost topological

group has been introduced.

CHAPTER- 7: In this chapter, a summary of the thesis is discussed.

Bibliography: A detailed reference to the relevant literature is given in the last part of this thesis.