This Thesis entitled “Certain Studies Relating to Mixed Sampling Plans and Reliability Based Sampling Plans” is the result of an investigation carried out by me in the Department of Statistics, Bharathiar University, Coimbatore. The material is presented in six Chapters. Chapter I focuses on a brief survey of the relevant background material on which this work is based.

Chapters from II to VI portray the studies and results of my investigation. Certain results on mixed sampling plans are presented in Chapter II. Results pertaining to Mixed Sampling Plans with variance criterion and also Mixed Quick Switching System are presented in chapter III.

Reliability based sampling plans are developed and included in Chapter IV. Certain results on multi-dimensional mixed sampling plans and procedure for matching of mixed plans are given in chapter V. A Study and contributions towards Bootstrap techniques are discussed in Chapter VI.

This Humble Thesis is Tremendously committed and Exclusively dedicated to the most motherly comforter our Lord Almighty.