## Probabilistic Methods Of Calculating The Life Time Distribution Of the System

## **Mohamed Swelem El-Said Hamed**

As a result of the development of present technology a high level for the reliability of systems is required. this thesis studies the methods of estimating the parameters for some important distributions used in the lifetime distribution of the reliability function for some redundant systems probabilistic analysis of a reliability function in life testing for a multivariate case probabilistic analysis of two -unit warm standby redundant systems with single - server and probabilistic analysis of two- unit cold standby redundant systems with three types of repair facilities. This searsh contain 5 chapter chapter 1: difintion and some concepts for the reliability theary .chapter 2: estimation methods of the parameters for the weiball distribution used in redundant systemchapter 3: probabilistic analysis of reliability funcation in life testing for the multivariate casechapter 4: probabilistic analysis of two unit warm stand by redundant systems with single serverthe fifth chapter develops three models for cold standby redundant systems consisting of two identical units these models are different in the sense that different types of repairman are employed .