1. Record Nr. UNINA9911019750603321 Autore Balakrishnan N. <1956-> **Titolo** Precedence-type tests and applications [[electronic resource] /] / N. Balakrishnan, H.K. Tony Ng Hoboken, NJ,: Wiley-Interscience, c2006 Pubbl/distr/stampa **ISBN** 1-280-44841-5 9786610448418 0-470-03784-9 0-470-03783-0 Descrizione fisica 1 online resource (325 p.) Collana Wiley Series in Probability and Statistics;; v.472 NgH. K. Tony <1975-> Altri autori (Persone) Disciplina 519.2 Soggetti Nonparametric statistics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references (p. 275-282) and indexes. Nota di contenuto Precedence-Type Tests and Applications; Contents; List of Tables; List of Tables; List of Figures; List of Figures; Preface; 1 Introduction; 1.1 PROBLEMS OF INTEREST; 1.2 SPECIAL CONSIDERATIONS; 1.3 SPECIAL FORM OF TESTING; 1.4 PRECEDENCE TESTS; 1.5 DEVELOPMENTS; 2 Preliminaries; 2.1 LIFE-TEST DATA; 2.2 ORDER STATISTICS; 2.2.1 Joint Densities and Markovian Property: 2.2.2 Marginal Densities: 2.2.3 Moments: 2.2.4 Results for the Uniform Distribution: 2.2.5 Results for the Exponential Distribution; 2.3 CENSORED DATA; 2.3.1 Type-I Censoring; 2.3.2 Type-II Censoring 2.4 PROGRESSIVELY CENSORED DATA2.4.1 General Properties; 2.4.2 Results for the Uniform Distribution; 2.4.3 Results for the Exponential Distribution; 2.5 SOME USEFUL LIFETIME DISTRIBUTIONS; 2.5.1 Exponential Distribution; 2.5.2 Gamma Distribution; 2.5.3 Weibull Distribution; 2.5.4 Extreme Value Distribution; 2.5.5 Lognormal Distribution; 2.6 WILCOXON'S RANK-SUM STATISTIC; 2.7 RANDOMIZED TEST; 3 Precedence Test; 3.1 INTRODUCTION; 3.2 CONCEPT OF PRECEDENCE TEST; 3.1 Schematic representation of a precedence lifetest: 3.3 EXACT NULL DISTRIBUTION: 3.4 EXACT POWER FUNCTION

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Sommario/riassunto

Full coverage of statistical techniques for developing and implementing precedence-type testsPrecedence-Type Tests and Applications provides a comprehensive overview of theoretical and applied approaches to a variety of problems in which precedence-type test procedures can be used. The authors clearly demonstrate the effectiveness of these tests in life-testing situations designed for making quick and reliable decisions in the early stages of an experiment. Most of the text's examples use life-time data; however, theoretical properties are also discussed in the context of precedenc