Record Nr. UNINA9910725083403321 Autore Mizutani Satoshi Titolo Which-Is-Better (WIB): Problems in Reliability Theory / / by Satoshi Mizutani, Xufeng Zhao, Toshio Nakagawa Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2023 **ISBN** 9783031273162 9783031273155 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (281 pages) Collana Springer Series in Reliability Engineering, , 2196-999X Disciplina 620.00452 Soggetti Computers Buildings—Repair and reconstruction Buildings—Maintenance System theory Electrical engineering Hardware Performance and Reliability **Building Repair and Maintenance** Complex Systems Electrical and Electronic Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Chapter 1. Introduction -- Chapter 2. Random Age Replacement Model -- Chapter 3. Replacement Model with Minimal Repair -- Chapter 4. Periodic Replacement Models -- Chapter 5. Extended Replacement Models -- Chapter 6. Which is Better for Standby or Parallel Systems --Chapter 7. Which is Better Problems in Shock and Damage Models --Chapter 8. Which is Better Problems in Backup Models -- Chapter 9. Which is Better Problems in Checkpoint Models -- Appendix A: Extended Failure Rates References -- Appendix B: Answer to Selected Problems -- Index. Sommario/riassunto This is the first book on the Which-Is-Better (WIB) Problem. These are

questions that in daily life include such as "Which is larger, younger and stronger?". The main objective of this book is summarizing WIB

Problems in maintenance and reliability theory. Optimal policies of replacement first, last and overtime are derived and compared theoretically and numerically, and WIB policies are determined. Furthermore, the reliability properties of parallel and standby systems are compared, and WIB system is determined. These WIB Problems are applied to shock and damage models and backup and checkpoint models of computer systems.