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Applications; 2.2.3 Nonparametric ANOM; 2.2.4 ANOM for Attributes Data; 2.3 Software for Experimental Design; 2.4 Missing Values; 2.5 Summary; Appendix; References; Exercises; 3 Designs that Incorporate Extraneous (Blocking) Factors; 3.1 Randomized Block Design; 3.1.1 Assumption; 3.1.2 Blocking an Out-of-Control Process; 3.1.3 Efficiency of a Randomized Block Design; 3.1.4 Example; 3.1.4.1 Critique; 3.1.5 ANOM; 3.2 Incomplete Block Designs
3.2.1 Balanced Incomplete Block Designs3.2.1.1 Analysis; 3.2.1.2 Recovery of Interblock Information; 3.2.1.3 ANOM; 3.2.2 Partially Balanced Incomplete Block Designs; 3.2.2.1 Lattice Design; 3.2.3 Nonparametric Analysis for Incomplete Block Designs; 3.2.4 Other Incomplete Block Designs; 3.3 Latin Square Design; 3.3.1 Assumptions; 3.3.2 Model; 3.3.3 Example; 3.3.4 Efficiency of a Latin Square Design; 3.3.5 Using Multiple Latin Squares; 3.3.6 ANOM; 3.4 Graeco-Latin Square Design; 3.4.1 Model; 3.4.2 Degrees of Freedom Limitations on the Design Construction
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4.5 ANOVA Table for Unreplicated Two-Factor Design?

Sommario/riassunto

A complete and well-balanced introduction to modern experimental design Using current research and discussion of the topic along with clear applications, Modern Experimental Design highlights the guiding role of statistical principles in experimental design construction. This text can serve as both an applied introduction as well as a concise review of the essential types of experimental designs and their applications. Topical coverage includes designs containing one or multiple factors, designs with at least one blocking factor, split-unit designs and their variations as