

# Contents

<b>Part 1      Statistical Data and Descriptive Measures</b>	
1 The Nature of Statistics . . . . .	1
2 Analysis of Ungrouped Data . . . . .	21
3 Analysis of Frequency Distributions . . . . .	53
4 The Computer and Statistical Analysis . . . . .	87
<b>Part 2      Probability and Probability Distributions</b>	
5 The Nature of Randomness and Probability . . . . .	113
6 Discrete Probability Distributions . . . . .	153
7 Continuous Probability Distributions . . . . .	191
<b>Part 3      Sampling</b>	
8 Sample Distributions and Estimation . . . . .	231
9 Sample Design . . . . .	295
<b>Part 4      Inference</b>	
10 Tests of Significance for Sample Means and Proportions . . . . .	328
11 Some Nonparametric Methods . . . . .	368

12 Statistical Decision Theory . . . . .	405
13 The <i>F</i> Distribution . . . . .	447
14 Experimental Design . . . . .	473

## Part 5 Regression and Correlation

15 Regression and Correlation: Linear Bivariate Analysis . . . . .	511
16 Regression and Correlation: Curvilinear Analysis . . . . .	565
17 Regression and Correlation: Multivariate Analysis . . . . .	604

## Part 6 Time Series and Index Numbers

18 Time Series: Trend Analysis . . . . .	641
19 Time Series: Periodic Analysis and Forecasting . . . . .	674
20 Index Numbers of Business Change . . . . .	698

## Appendix Tables

A Squares, Square Roots, and Reciprocals . . . . .	735
B Logarithms of Numbers, 1,000 to 9,999 . . . . .	744
C Binomial Probability Distribution . . . . .	762
D Cumulative Binomial Probability Distribution . . . . .	795
E Values of $e^{-\lambda}$ . . . . .	825
F Poisson Probability Distribution . . . . .	826
G Cumulative Poisson Probability Distribution . . . . .	832
H Areas and Ordinates of the Normal Curve . . . . .	838
I Areas in One Tail of the Normal Curve . . . . .	843
J Student's <i>t</i> Distribution . . . . .	844

K Values of Chi-Square . . . . .	845
L <i>F</i> Distribution . . . . .	847
M Values of the Correlation Coefficient to Different Levels of Significance . . . . .	851
N Random Sampling Numbers . . . . .	852
O Unit Normal Loss Function . . . . .	860
<b>Answers to Odd-Numbered Problems</b> . . . . .	862
<b>Index</b> . . . . .	878