

# TABLE OF CONTENTS

<b>PREFACE . . . . .</b>	<b>vii</b>
<b>1 SCIENCE AND OPTIMAL DECISION . . . . .</b>	<b>1</b>
<i>1 Summary and Intent. 2 Some Presuppositions. 3 The Social Importance of the Meaning of Science and Ethics. 4 An Illustration. 5 Science and Decision-Making. 6 Is What "Ought to be" Nonfactual? 7 Does "Ought" Mean "Consistent"? 8 When Using Scientific Information, Do as the Scientists Do. 9 The "Ought" and Value Measurements. 10 Science and Morality. 11 Freedom and Science. 12 Indebtedness.</i>	
<b>2 PLEASURE AND PREFERENCE . . . . .</b>	<b>31</b>
<i>1 Summary and Intent. 2 Kant's Imperatives of Skill. 3 Kant's Assertorial Imperatives. 4 The Immediacy of Sensation. 5 The Pleasure-Pain Accounting System. 6 Is Pleasure a Sufficient Basis for Value? 7 The Uncertainty of Pleasure: Expected Value. 8 The Determination of Pleasure. 9 Behaviorism. 10 A Precautionary Comment. 11 A Comment on Happiness. 12 Indebtedness.</i>	

**3 PROFITS AND VALUES . . . . . 50**

*1 Summary and Intent. 2 Is Profit a Value Measurement? 3 What Time Period Is the Basis for Measuring Profits? 4 Discounting for Time and Uncertainty. 5 Opportunity Costs. 6 Return on Investment. 7 Overhead Costs. 8 Managerial Accounting as a Branch of Industrial Organization. 9 Managerial Accounting, Errors and Psychology. 10 Currently Calculated Profits Are Not Values. 11 A Practical Reflection. 12 Managerial Accounting. 13 Indebtedness.*

**4 THE THEORETICAL CONTENT OF FACTS . . . . . 70**

*1 Summary and Intent. 2 An Unsatisfactory Concept of Scientific Method. 3 Are There Levels of Generalization in Science? 4 Science and Communication. 5 Measurements and Theories. 6 Where Are the Anchors and Controls of Science? 7 Recapitulation and a Moral. 8 Communication and Values. 9 Indebtedness.*

**5 THE TELEOLOGY OF MEASUREMENT . . . . . 93**

*1 Summary and Intent. 2 Functional Definitions. 3 A Functional Definition of Measurement. 4 Decision Problems of Measurement. 5 Language. 6 Class Assignments. 7 Relations. 8 Orderings. 9 Number Assignments. 10 Economics of Measurement Language. 11 Specifications. 12 Standardization. 13 Standards and States of Nature. 14 A Sensitivity Measurement: An Illustration. 15 Accuracy and Control. 16 Fact and Theory. 17 Indebtedness.*

**6 OBJECTIVE PROBABILITY . . . . . 137**

*1 Summary and Intent. 2 General Remarks on Probability. 3 Probability as a Relative Frequency. 4 Dependent Events. 5 Infinite Reference Classes. 6 Relative Frequencies and Rare Events. 7 Probability Defined in Terms of Belief. 8 Probability Defined in Terms of Judgment. 9 Judgment and Relative Frequencies. 10 Standards and Operations for Counting Classes. 11 Sampling. 12 Random Numbers. 13 Probability Standards for Nonordered Reference Classes. 14 Minimax and Bayesian Attitudes. 15 Probability, Values, and Opinions. 16 Untenable Division of the World into Fact and Value. 17 A Tentative Conclusion. 18 A Reflection on the Chapter. 19 Indebtedness.*

**7 A STANDARD FOR VALUE MEASUREMENT . . . . . 174**

*1 Summary and Intent. 2 Personality. 3 Measuring Ascendance and Submission. 4 Probability of Outcome and Probability of*

Choice. 5 *Measuring Preferences for Acts (Habit and Tastes)*. 6 *The Presuppositions of Preference Measures*. 7 *Knowledge*. 8 *Intelligence*. 9 *Values of Outcomes (Intention)*. 10 *Critical Appraisal of the Program for Value Research*. 11 "Ought." 12 *The Horizon*. 13 *Can Learning be Valued?* 14 *Maximization and Value Measurement*. 15 *Subjective Probabilities*. 16 *Estimated Probabilities*. 17 *Reflections on this Chapter*. 18 *Indebtedness*.

## **8 RATIONAL BEHAVIOR . . . . . 219**

1 *Summary and Intent*. 2 *One Utility Scale*. 3 *Utilities and Gambles*. 4 *The Language Base of the Theory*. 5 *Meaningfulness in the Theory*. 6 *Ordering of Utilities*. 7 "Sure-thing" Axiom. 8 *Axiom of Utility Differences*. 9 *Ordering of Choices in a Gamble*. 10 *Formal Characteristics of the Utility Scale*. 11 *Are These Axioms Tautologies?* 12 *Empirical Interpretation of Axiomatic Systems*. 13 *The Closure Axiom*. 14 *Doubts About the Sure-thing Axiom*. 15 *Subjective Probabilities*. 16 *Testing a Theory: What Is Evidence?* 17 *A Moral Comment on this Chapter*. 18 *Indebtedness*.

## **9 ADDITIVITY OF VALUES . . . . . 250**

1 *Summary and Intent*. 2 *Antipathy to Number Assignments*. 3 *Assigning Dollar Values to Objectives*. 4 *Testing Number Assignments*. 5 *The Meaning of Independent Tests*. 6 *Additivity of Values*. 7 *Other Tests of Number Assignments to Values*. 8 *Various Theoretical Approaches to Value Measurements*. 9 *Indebtedness*.

## **10 SENSITIVITY AND CHOICE . . . . . 273**

1 *Summary and Intent*. 2 *Sensitivity of Choice*. 3 *Probability of Choice*. 4 *Is Probability of Choice Meaningful under Conditions of Full Knowledge?* 5 *Sensitive and Insensitive Ranges*. 6 *Degree of Attainment as a Stimulus*. 7 *Preference and Probability of Choice*. 8 *Conceptual Frameworks for Value Measurement*.

## **11 JUDGMENT . . . . . 286**

1 *Summary and Intent*. 2 *Belief*. 3 *Agreement*. 4 *Judgment*. 5 *Illustrations of Judgment*. 6 *Valid Judgments*. 7 *Indebtedness*.

**12 VALUES OF SOCIAL GROUPS . . . . . 298**

1 *Summary and Intent.* 2 *Groups.* 3 *The Group as an Individual.* 4 *The Group as a Set of Individuals.* 5 *Methodological Requirements of a Procedure.* 6 *The Group as an Individual Composed of Members.* 7 *Conflict.* 8 *Organic and Organized Groups.* 9 *Organized Groups.* 10 *Institutions.* 11 *Social Morality.* 12 *Personal Values in a Group.* 13 *Bargaining.* 14 *Indebtedness.*

**13 ASSETS AND TRANSACTIONS . . . . . 321**

1 *Summary and Intent.* 2 *Transaction Theory and Organizations.* 3 *The Accounting Axiom: Assets.* 4 *Transactions.* 5 *Breakdown of Decisions into Elements.* 6 *Is Axiom 1 a Tautology?* 7 *Some Criticism of Axiom 1.* 8 *Criticism of Axiom 2: the Closed System.* 9 *Learning from Experience.* 10 *Conclusion.*

**14 DECISION METHODS OF SCIENCE . . . . . 339**

1 *Summary and Intent.* 2 *Some Concepts.* 3 *Conventional, Formal, Deductive Judgments.* 4 *Nonconventional, Nonformal, Deductive Judgments.* 5 *Nonconventional, Formal, Deductive Judgments.* 6 *Conventional, Nonformal, Deductive Judgments.* 7 *Nonconventional, Nonformal, Inductive Judgments.* 8 *Nonconventional, Formal, Inductive Judgments.* 9 *Conventional, Formal and Nonformal, Inductive Judgments.* 10 *Methodological Camps.* 11 *Disagreement as an End.* 12 *The Radical.*

**15 VALUES AND TIME . . . . . 357**

1 *Summary and Intent.* 2 *Classification of Value Theories.* 3 *Situational Value Theories.* 4 *Temporal, Terminal, Consistent Goals.* 5 *Temporal, Nonterminal, Consistent Goals: Ideals.* 6 *Temporal, Inconsistent, Terminal Goals.* 7 *Temporal, Inconsistent, Nonterminal: the Inexplicable.* 8 *"The" Values of a Decision-maker.*

**16 ETHICS—THE PROBLEM OF SCOPE . . . . . 365**

1 *Summary and Intent.* 2 *What is Ethics?* 3 *Individual and Social Ethics.* 4 *A Classification of Answers to the Problem of Ethics.* 5 *The Right Act: Morality.* 6 *Independent Goals.* 7 *Nonindependent Goals.* 8 *Conflict.* 9 *The Conflict of Hypothesis.* 10 *A Possible Resolution.* 11 *But.* 12 *Feeling.* 13 *The Challenge.*

**INDEX . . . . . 383**