Contents

Preface		vii
CHAPTER I	BASICS OF LOGIC	1
I.1	Introduction	1
1.2	The Structure of Simple Statements	1
1.3	The Structure of Complex Statements	2
1.4	Simple and Complex Properties	8
1.5	Validity	9
CHAPTER II	PROBABILITY AND INDUCTIVE LOGIC	12
II.1	Introduction	12
11.2	Arguments	12
11.3	Logic	14
II.4	Inductive versus Deductive Logic	17
11.5	Epistemic Probability	23
11.6	Probability and the Problems of Inductive Logic	26
CHAPTER II	II THE TRADITIONAL PROBLEM OF INDUCTION	30
*** *	*	30
III.1	Introduction	30
III.2	Hume's Argument	35
III.3	The Inductive Justification of Induction	44
III.4 III.5	The Pragmatic Justification of Induction Summary	49
111.0	Summary	10
CHAPTER I	THE GOODMAN PARADOX AND	
	THE NEW RIDDLE OF INDUCTION	51
IV.1	Introduction	51
IV.2	Regularities and Projection	52
IV.3	The Goodman Paradox	56
IV.4	The Goodman Paradox, Regularity, and the	
	Principle of the Uniformity of Nature	60
IV.5	Summary	67

CH	APTER V	MILL'S METHODS OF EXPERIMENTAL	
		INQUIRY AND THE NATURE OF	
		CAUSALITY	69
	V.1	Introduction	69
	V.2	Causality and Necessary and Sufficient Conditions	69
	V.3	Mill's Methods	73
	V.4	The Direct Method of Agreement	74
	V.5	The Inverse Method of Agreement	79
	V.6	The Method of Difference	85
	V.7	The Combined Methods	90
	V.8	The Application of Mill's Methods	94
	V.9	Sufficient Conditions and Functional Relationships	97
	V.10	Lawlike and Accidental Conditions	101
CH	APTER V	THE PROBABILITY CALCULUS	109
	VI.1	Introduction	109
	VI.2	Probability, Arguments, Statements, and Properties	109
	VI.3	Disjunction and Negation Rules	111
	VI.4	Conjunction Rules and Conditional Probability	117
	VI.5	Expected Value of a Gamble	128
	VI.6	Bayes' Theorem	130
	VI.7	Probability and Causality	134
CHA	APTER V	II KINDS OF PROBABILITY	137
	VII.1	Introduction	137
	VII.2	Rational Degree of Belief	137
	VII.3	Utility	138
	VII.4	Ramsey	141
	VII.5	Relative Frequency	144
	VII.6	Chance	146
CHA	APTER V	III PROBABILITY AND SCIENTIFIC INDUCTIVE LOGIC	151
		INDUCTIVE LOGIC	101
	VIII.1	Introduction	151
	VIII.2	Hypothesis and Deduction	151
	VIII.3	Quantity and Variety of Evidence	153
	VIII.4	Total Evidence	154
	VIII.5	Convergence to the Truth	156
Ansv	wers to Se	elected Exercises	158
Inde	ex		171