## TABLE OF CONTENTS

| PR   | PREFACE   |      |
|------|---|------|
| Ac   | KNOWLEDGEMENTS  | xiii |
| I: ( | ON SCIENCE  |      |
| 1.   | Some remarks on the philosophy of science                         | 1    |
| 2.   | Information and decision-making as tools of philosophy of science | 8    |
| 3.   | Method and creativity in science                                  | 19   |
| 4.   | Sociology and models of rational behaviour                        | 28   |
| 5.   | Mathematical models and social facts                              | 40   |
| 6.   | Science as a search for information                               | 45   |
| II:  | ON INFERENCE  |      |
| 7.   | Inference or behaviour?   | 54   |
| 8.   | A note on confirmation of statistical hypotheses                  | 62   |
| 9.   | On some basic patterns of statistical inference                   | 70   |
| 10.  | A method of deciding between $N$ statistical hypotheses           | 80   |
| 11.  | A pragmatic justification of rules of statistical inference       | 87   |
| 12.  | On sequential inference   | 96   |
| 13.  | Interpretations of the maximum likelihood principle               | 106  |
| III. | ON INFORMATION AND DECISION MAKING                                |      |
| 14.  | Some remarks concerning the criterion of rational decision-making | 114  |
| 15.  | The concept of distribution of goods                              | 128  |
| 16.  | The value of perfect information                                  | 140  |

| viii     | TABLE OF CONTENTS   |     |
|----------|---|-----|
| 17.      | Questions and their pragmatic value                               | 154 |
| 18.      | Two concepts of information                                       | 157 |
| 19.      | Types of information and their role in the methodology of science | 167 |
| 20.      | Information in decision-making. Some logical aspects              | 177 |
| 21.      | Decision-making and future research. Some theoretical problems    | 191 |
| 22.      | On formal aspects of distributive justice                         | 200 |
| 23.      | Philosophy and decision-making                                    | 210 |
| 24.      | The concept of unreliable information                             | 222 |
| 25.      | On defining information   | 226 |
| APPENDIX |   |     |
| 26.      | Rationality as a value  | 232 |

INDEX OF NAMES

241