

# CONTENTS

<i>Preface to the Third Edition</i>	page vi
<i>Preface to the Second Edition</i>	vii
<i>Preface to the First Edition</i>	viii
I LOGIC AND SCIENTIFIC INFERENCE	I
II PROBABILITY	23
III SAMPLING	43
IV ERRORS	61
V PHYSICAL MAGNITUDES	80
VI MENSURATION	100
VII NEWTONIAN DYNAMICS	126
VIII LIGHT AND RELATIVITY	148
IX MISCELLANEOUS QUESTIONS	183
X STATISTICAL MECHANICS AND QUANTUM THEORY	212
<i>Appendix I</i>	
INFINITE NUMBERS	263
<i>Appendix II</i>	
A SUMMATION IN THE THEORY OF SAMPLING	267
<i>Appendix III</i>	
A PROOF THAT $\pi$ IS IRRATIONAL	268
<i>Index</i>	269