

Brief Contents

<i>Foreword</i>	v
<i>Preface to the Second Edition</i>	vii
<i>Preface to the First Edition</i>	x
<i>Contents</i>	xiii
<i>List of Symbols</i>	xix

PART ONE STATICS

CHAPTER 1	Introduction to Statics	3
CHAPTER 2	Equilibrium of Forces	46
CHAPTER 3	Truss, Frames, and Cables	98
CHAPTER 4	Friction	217
CHAPTER 5	Properties of Lines, Surfaces, and Physical Bodies	287
CHAPTER 6	Virtual Work	366
CHAPTER 7	Simple Lifting Machines	420

PART TWO DYNAMICS

CHAPTER 8	Kinematics of Particles	457
CHAPTER 9	Kinematics of Rigid Bodies	510
CHAPTER 10	Kinetics of Particles and Rigid Bodies	555
CHAPTER 11	Principle of Work, Power, and Energy	622
CHAPTER 12	Principle of Impulse and Momentum	669
CHAPTER 13	Mechanical Vibration	716

<i>Appendix A</i>	<i>Major Timeline of Classical Mechanics</i>	759
<i>Appendix B</i>	<i>Dimensions and Units</i>	761
<i>Appendix C</i>	<i>Trigonometric and Hyperbolic Relations</i>	763
<i>Appendix D</i>	<i>Differentiation and Integration Formulae</i>	764
<i>Appendix E</i>	<i>Properties of Geometrical Figures</i>	767
<i>Appendix F</i>	<i>Properties of Homogeneous Solids</i>	771
<i>Appendix G</i>	<i>Some Prerequisites and Co-requisites</i>	775
<i>Appendix H</i>	<i>Advance Topic (Shear Force and Bending Moment)</i>	780
<i>Appendix I</i>	<i>Answers</i>	787
<i>Bibliography</i>		793
<i>Index</i>		795