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""3.6 Central Repulsive Force""""3.7 Dissipative Forces""; ""CHAPTER IV - Dynamics of Particle Systems and Plane Rigid Bodies""; ""4.1 Introduction""; ""4.2 Relative Motion of Two Particles""; ""4.3 Dynamics of Multiparticle Systems""; ""4.4 Kinematics of Plane Rigid Bodies""; ""4.5 Dynamics of Plane Systems""; ""4.6 Impulse-Momentum Principles for Systems""; ""4.7 The Work-Energy Principle for Particle Systems and Plane Rigid Bodies""; ""4.8 Work and Energy for General Plane Systems; Real and Ideal Constraints""; ""CHAPTER V - Technical Applications in Plane Motion""; ""5.1 Introduction""
 ""5.2 Elementary Analysis Force and Acceleration at Particular Instants""; ""5.3 Impact and Impulsive Motion""; ""5.4 Variable Mass""; ""5.5 Conservative Systems""; ""CHAPTER VI - Rigid-Body Dynamics in Three Dimensions""; ""6.1 Introduction to Rigid-Body Kinematics in Space""; ""6.2 General Displacement of a Rigid Body; Finite Rotations and Euler's Theorem""; ""6.3 Small Rotations of a Rigid Body; Angular Velocity""; ""6.4 Rotating Coordinates; General Relative Motion Equations""; ""6.5 The Angular Momentum of a Rigid Body; Moments and Products of Inertia""
 ""6.6 The Kinetic Energy of a Rigid Body the Work-Energy Principle""; ""6.7 Special Forms of the Dynamical Equations; Euler's Equations""; ""6.8 Equilibrium of a Rigid Body""; ""CHAPTER VII - Three-Dimensional Applications of the Principles of Dynamics""; ""7.1 Introduction""; ""7.2 Effects of the Earth's Rotation on Particle Motion near the Surface""; ""7.3 Fixed-Axis Rotation""; ""7.4 Application of d'Alembert's Principle""; ""7.5 Gyroscopic Effects""; ""7.6 Intrinsic Equations of the Gyroscope""; ""7.7 Description of Spatial Position: Euler's Angular Coordinates""
 ""CHAPTER VIII - The Principle of Virtual Work""

Sommario/riassunto

<DIV>Beginning text presents complete theoretical treatment of mechanical model systems and deals with technological applications. Topics include introduction to calculus of vectors, particle motion, dynamics of particle systems and plane rigid bodies, technical applications in plane motions, theory of mechanical vibrations, and more. Exercises and answers appear in each chapter.</DIV>