# TABLE OF CONTENTS

## Section I: Applied Physiology

- 1. Applied Physiology of Body Fluids in Dogs and Cats
- 2. Applied Renal Physiology

## **Section II: Electrolyte Disorders**

- 3. Disorders of Sodium and Water: Hypernatremia and Hyponatremia
- 4. Disorders of Chloride: Hyperchloremia and Hypochloremia
- 5. Disorders of Potassium: Hypokalemia and Hyperkalemia
- 6. Disorders of Calcium: Hypercalcemia and Hypocalcemia
- 7. Disorders of Phosphorus: Hypophosphatemia and Hyperphosphatemia
- 8. Disorders of Magnesium: Magnesium Deficit and Excess

#### **Section III: Acid-Base Disorders**

- 9. Introduction to Acid-Base Disorders
- 10. Metabolic Acid-Base Disorders
- 11. Respiratory Acid-Base Disorders
- 12. Mixed Acid-Base Disorders
- 13. Strong Ion Approach to Acid-Base Disorders

## **Section IV: Fluid Therapy**

- 14. Introduction to Fluid Therapy
- 15. Technical Aspects of Fluid Therapy
- 16. Monitoring Fluid Therapy and Complications of Fluid Therapy
- 17. Perioperative Management of Fluid Therapy
- 18. Fluid and Electrolyte Disturbances in Gastrointestinal and Pancreatic Disease
- 19. Fluid, Electrolyte, and Acid-Base Disturbances in Liver Disease

- 20. Fluid Therapy in Endocrine and Metabolic Disorders
- 21. Fluid and Diuretic Therapy in Heart Failure
- 22. Managing Fluid and Electrolyte Disorders in Renal Failure
- 23. Shock Syndromes

# **Section V: Special Therapy**

- 24. Blood Transfusion and Blood Substitutes
- 25. Parenteral Nutrition
- 26. Enteral Nutrition
- 27. Fluid Therapy with Macromolecular Plasma Volume Expanders
- 28. Peritoneal Dialysis
- 29. Hemodialysis.