

Contents

UNIT I PROFESSIONAL ISSUES

- 1 NURSE ANESTHESIA: A HISTORY OF CHALLENGE, 1
- 2 NURSE ANESTHESIA SPECIALTY PRACTICE AND EDUCATION IN THE UNITED STATES, 22
- 3 LEGAL CONCEPTS IN NURSE ANESTHESIA PRACTICE, 27

UNIT II SCIENTIFIC FOUNDATIONS

- 4 NURSE ANESTHESIA RESEARCH: SCIENCE OF AN ORDERLY, PURPOSEFUL, AND SYSTEMATIC NATURE, 36
- 5 GENERAL PRINCIPLES, PHARMACODYNAMICS, AND DRUG RECEPTOR CONCEPTS, 53
- 6 PHARMACOKINETICS, 62
- 7 PHARMACOKINETICS OF INHALATION ANESTHETICS, 78
- 8 INHALATION ANESTHETICS, 85
- 9 INTRAVENOUS INDUCTION AGENTS, 104
- 10 LOCAL ANESTHETICS, 125
- 11 OPIOID AGONISTS AND ANTAGONISTS, 145
- 12 NEUROMUSCULAR BLOCKING AGENTS, REVERSAL AGENTS, AND THEIR MONITORING, 158
- 13 AUTONOMIC AND CARDIAC PHARMACOLOGY, 186
- 14 CHEMISTRY AND PHYSICS OF ANESTHESIA, 212

UNIT III TECHNOLOGY RELATED TO ANESTHESIA PRACTICE

- 15 ANESTHESIA EQUIPMENT, 242
- 16 CLINICAL MONITORING I: CARDIOVASCULAR SYSTEM, 292

- 17 CLINICAL MONITORING II: RESPIRATORY AND METABOLIC SYSTEMS, 313
- 18 CLINICAL MONITORING III: NEUROLOGIC SYSTEM, 325

UNIT IV PREOPERATIVE PREPARATION

- 19 PREOPERATIVE EVALUATION AND PREPARATION OF THE PATIENT, 335

UNIT V INTRAOPERATIVE MANAGEMENT

- 20 FLUIDS, ELECTROLYTES, AND BLOOD COMPONENT THERAPY, 382
- 21 POSITIONING FOR ANESTHESIA AND SURGERY, 403
- 22 AIRWAY MANAGEMENT, 423
- 23 CARDIOVASCULAR ANATOMY, PHYSIOLOGY, PATHOPHYSIOLOGY, AND ANESTHESIA MANAGEMENT, 470
- 24 ANESTHESIA FOR CARDIAC SURGERY, 510
- 25 ANESTHESIA FOR VASCULAR SURGERY, 561
- 26 RESPIRATORY ANATOMY, PHYSIOLOGY, PATHOPHYSIOLOGY, AND ANESTHETIC MANAGEMENT, 590
- 27 ANESTHESIA FOR THORACIC SURGERY, 662
- 28 NEUROANATOMY, NEUROPHYSIOLOGY, AND NEUROANESTHESIA, 686
- 29 RENAL ANATOMY, PHYSIOLOGY, PATHOPHYSIOLOGY, AND ANESTHESIA MANAGEMENT, 729
- 30 HEPATOBILIARY AND GASTROINTESTINAL DISTURBANCES AND ANESTHESIA, 763
- 31 ANESTHESIA FOR LAPAROSCOPIC SURGERY, 806
- 32 MUSCULOSKELETAL SYSTEM ANATOMY, PHYSIOLOGY, PATHOPHYSIOLOGY, AND ANESTHESIA MANAGEMENT, 817

- | | | | |
|-----------|--|-----------|---|
| 33 | THE ENDOCRINE SYSTEM AND ANESTHESIA, 840 | 44 | REGIONAL ANESTHESIA: SPINAL AND EPIDURAL ANESTHESIA, 1070 |
| 34 | HEMATOLOGY AND ANESTHESIA, 880 | 45 | REGIONAL ANESTHESIA: UPPER AND LOWER EXTREMITY BLOCKS, 1102 |
| 35 | THERMAL INJURY AND ANESTHESIA, 900 | 46 | OBSTETRIC ANESTHESIA, 1127 |
| 36 | TRAUMA ANESTHESIA, 914 | 47 | NEONATAL ANESTHESIA, 1163 |
| 37 | OUTPATIENT ANESTHESIA, 930 | 48 | PEDIATRIC ANESTHESIA, 1191 |
| 38 | ANESTHESIA FOR EAR, NOSE, THROAT, AND MAXILLOFACIAL SURGERY, 952 | 49 | GERIATRICS AND ANESTHESIA PRACTICE, 1214 |
| 39 | ANESTHESIA FOR OPHTHALMIC PROCEDURES, 976 | 50 | POSTANESTHESIA RECOVERY, 1224 |
| 40 | ANESTHESIA FOR ORTHOPEDICS AND PODIATRY, 999 | 51 | PAIN MANAGEMENT, 1244 |
| 41 | THE IMMUNE SYSTEM AND ANESTHESIA, 1015 | 52 | ANESTHESIA FOR THERAPEUTIC AND DIAGNOSTIC PROCEDURES, 1260 |
| 42 | ANESTHESIA AND LASER SURGERY, 1036 | 53 | ANESTHESIA COMPLICATIONS, 1289 |
| 43 | OBESITY AND ANESTHESIA PRACTICE, 1050 | | |