CONTENTS

1. Inflammation **1**
- Acute Inflammation 3
- Resolution 7
- Suppuration 8
- Chronic Inflammation 8
- Physical Therapy Intervention 13

2. Edema **17**
- Definition 17
- Pitting Edema and Non-pitting Edema 18
- Adverse Effects of Edema 21
- Assessment of Edema 22
- Increased Venous Pressure 24
- Local Edema 25
- Physical Therapy Management of Edema 26
- Pneumatic Compression Therapy (PCT) 30

3. Arthritis **33**
- Common Types of Arthritis 34
- Osteoarthritis 39
- Rheumatoid Arthritis 49
- Ankylosing Spondylitis 57
- Adhesive Capsulitis 63
- Bursitis 66
- Myalgia 68
- Fibromyositis 70

4. Skin Diseases **75**
- Acne 75
- Psoriasis 83
- Alopecia Areata 90
- Leucoderma (Vitiligo) 93
- Leprosy 98
- Sexually Transmitted Diseases 107

5. Deficiency Disorders **114**
- Rickets 114
- Osteoporosis 118

- Diabetes 125
- Obesity 136

6. Psychiatric Conditions 147

- Psychosis 147
- Schizophrenia 147
- Mood Disorders 151
- Neurotic Stress-related and Somatoform Disorder 152
- Dementia 153
- Physiotherapy Management for General Psychiatric Conditions 154

7. Respiratory Conditions 160

- Structure of Human Respiratory System 160
- Respiratory Neural Control 170
- Respiratory Chemical Control 171
- Chest Examination including Auscultation and Percussion 172
- Various Investigative Procedures (Invasive and Noninvasive) Used in the Diagnosis of Various Respiratory Disorders 177
- Various Respiratory Conditions and their Physiotherapy Management 180
- Chronic Bronchitis 182
- Cor Pulmonale 184
- Emphysema 185
- Asthma 186
- Lung Abscess 191
- Bronchiectasis 193
- Cystic Fibrosis 195
- Pulmonary Tuberculosis 196
- Pneumonia 197
- Physiotherapy Management for Respiratory Conditions 198
- Removal of Secretions 203

8. Cardiovascular Conditions 212

- Anatomy and Physiology of Cardiovascular System 212
- Cardiovascular History and Examination 218
- Heart Failure 224
- Varicose Veins 233
- Raynaud's Disease 239
- Atherosclerosis 243
- Hypotension 244
- Hypertension 247
- Deep Vein Thrombosis 250

- Embolism 254
- Gangrene 257
- Buerger Disease 259

9. Neurological Conditions 265

9.1: Examination of Neurological Disorders, Knowledge of Various Investigative Procedures Used in the Diagnosis of Various Neurological Disorders 265
- Investigative Procedures Used in the Diagnosis of Various Neurological Disorders 266
- Nerve Conduction Studies 275
- Principles of NCV Testing 277

9.2: Hemiplegia 283
- Physiotherapy Management of the Hemiplegia 288

9.3: Paraplegia 302
- Causes of Paraplegia 302
- Classifications of Paraplegia 303
- Physiotherapy Management of Paraplegia 304

9.4: Tabes Dorsalis 308
- Causes 308
- Sex 308
- Pathology 308
- Stages 309
- Physiotherapy Management 310

9.5: Spina Bifida 311
- Classification 312
- Major Disabilities in Spina Bifida 312
- Incidence of Spina Bifida 314
- Causes of Spina Bifida 314
- Management 314

9.6: Cerebral Palsy 317
- Causes 318
- Classification 319
- Clinical Features and Associated Conditions 322
- Other Important Points 323
- Radiological Assessment 323
- Prediction of the Functional Ability of the CP Child in Future 323
- The Physiotherapy Assessment of CP 324
- Musculoskeletal Limitations in a Cerebral Palsy Patient 325
- Medical Management of Cerebral Palsy 326

9.7: Guillain-Barre Syndrome 332
- Causes 332
- Features 332
- Investigation of the GBS 333
- Treatment 334

9.8: Parkinsonism 337
- Epidemiology 337
- Etiology 337
- Pathophysiology 339
- Clinical Features of the Parkinsonism 341
- Diagnosis 349
- Prognosis 349
- Physiotherapy Management 349
- General Goals of Treatment 350
- Prescription for Assistive Devices 352

9.9: Disseminated Sclerosis (Multiple Sclerosis) 354
- Progression and Features 354
- Causes 354
- Risk Factors 354
- Pathophysiology 355
- Clinical Features 355
- Types 357
- Treatment 358

9.10: Amyotropic Lateral Sclerosis 361
- Etiology 361
- Classification 361
- Physiotherapy Evaluation of ALS 362
- Goals of Physiotherapy Management 363
- Treatment of MND 363

9.11: Syringomyelia 367
- Causes 367
- Pathology 368
- Physiotherapeutic Management of Syringomyelia 369

9.12: Motor Neuron Disease 370
- Pathology of MND 372
- Types and Features of MND 373
- Diagnosis of MND 375
- Treatment of MND 375

9.13: Peripheral Nerve, Cranial Nerve Lesions, Bell's Palsy and Facial Palsy 376
- Anatomy and Organization 376
- Assessment of the Peripheral Nerve Injury 377

- Cranial Nerve 381
- Bell's Palsy 387
- Facial Paralysis 391
- Investigative Process 393

9.14: Neuritis and Neuralgia-Brachial, Sciatica 394
- Causes 394
- Signs and Symptoms 395
- Treatment 395

9.15: Poliomyelitis 407
- Pathophysiology 407
- Subclinical Infection 408
- Non-paralytic Poliomyelitis 409
- Paralytic Poliomyelitis 410
- Management on the Basis of the Condition of the Patient 412
- Post-surgical Physiotherapy 416

9.16: Meningitis 418
- Causes 418
- Treatment 420
- Encephalitis 421
- Polyneuritis 425

9.17: Traumatic Head Injuries 428
- Physiotherapy Assessment of the Head Injury Patient 433
- Rehabilitation of the Traumatic Brain Injury 436
- Management of Tone and Spasticity 440
- Physical Medicine and Rehabilitation of the Head and Traumatic Brain Injury 440

9.18: Spinal Cord Injury 443
- Causes of Spinal Cord Injuries 443
- Level of Lesion 444
- Classification of Spinal Cord Injury 444
- Sensory and Motor Testing for Spinal Cord Injury 445
- Measurement Scales 446
- Effects Clinical Effects of Spinal Cord Injury 446
- Complete or Incomplete Spinal Cord Injury 448
- Spinal Shock 448
- Repairing the Spinal Cord 454
- ADL Training 461
- Methods to Deal with Flaccid Bladder 462

Index 479