

Part I Certification Examination Outline

Approximate Target Weights

Class 1: Type of Problem/Organ System

A. Neurologic Disorders (30%)

1. Stroke
2. Spinal Cord Injury
3. Traumatic Brain Injury
4. Neuropathies
 - a) Mononeuropathies
 - b) Polyneuropathies
 - c) Carpal Tunnel Syndrome
 - d) Other Entrapment Neuropathies
5. Other Neurologic Disorders
 - a) Multiple Sclerosis
 - b) Motor Neuron Disease
 - c) Poliomyelitis
 - d) Guillain Barré Syndrome
 - e) Cerebral Palsy
 - f) Spina Bifida
 - g) Duchenne Muscular Dystrophy
 - h) Myotonic Muscular Dystrophy
 - i) Inflammatory Myopathies
 - j) Other Myopathies
 - k) Thoracic Outlet Syndrome
 - l) Plexopathy
 - m) Radiculopathy
 - n) Parkinson Disease
 - o) Other Neuromuscular Disorders

B. Musculoskeletal Medicine (32%)

1. Arthritis
 - a) Rheumatoid Arthritis
 - b) Osteoarthritis
 - c) Collagen Disease
 - d) Spondyloarthropathy
 - e) Other Arthritis

2. Soft Tissue & Orthopedic Problems

- a) Acute Trauma
- b) Chronic Trauma/Overuse
- c) Complex Regional Pain Syndrome Type I (Reflex Sympathetic Dystrophy)
- d) Fibromyalgia/Myofascial Pain
- e) Burns
- f) Fractures
- g) Osteoporosis
- h) Spinal Disorders
- i) Strains/Sprains
- j) Tendinitis/Bursitis
- k) Orthopedic/Rheumatology
- l) Other Soft Tissue Disease

C. Amputation (5%)

1. Upper Extremity
2. Lower Extremity

D. Medical Rehabilitation (8%)

1. Cardiovascular
 - a) Ischemic Heart Disease
 - b) Peripheral Arterial Disease
 - c) Venous Disease
 - d) Vascular Disorders
 - e) Lymphedema
 - f) Other Cardiovascular
2. Pulmonary Disease
 - a) COPD
 - b) Impaired Ventilation
 - c) Other Pulmonary Problems
3. GU / GI Disorders
 - a) Neurogenic Bladder
 - b) Renal Impairment/Failure
 - c) Neurogenic Bowel
 - d) Sexuality and Reproductive Issues
 - e) Other GU/GI Disorders

D. Medical Rehabilitation, cont'd

4. Cancer
5. Infectious Disease
6. Endocrine/Metabolic (Incl. Diabetes)
7. Transplant

E. Rehabilitation Problems & Outcomes (15%)

1. Physical Complications
 - a) Spasticity
 - b) Contracture
 - c) Hydrocephalus
 - d) Seizures
 - e) Pressure Injuries
 - f) Posture/Balance Disorders
 - g) Abnormal Gait
 - h) Dysphagia/Aspiration
 - i) Bed Rest/Deconditioning
 - j) Paralysis/Weakness
 - k) Heterotopic Ossification
 - l) Other Physical Complications
2. Cognitive/Sensory Dysfunction
 - a) Speech and Language Disorders
 - b) Visual Dysfunction
 - c) Cognitive Disorders
 - d) Sleep Disorders
 - e) Other Cognitive/Sensory Dysfunction
3. Psychiatric/Psychological Problems
 - a) Depression
 - b) Substance Abuse
 - c) Dementia/Pseudodementia
 - d) Disorders of Consciousness
 - e) Other Psych. Problems
4. Pain
5. Other

F. Basic Sciences (10%)

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Class 2: Focus of Question / Patient Management

A. Patient Evaluation & Diagnosis (31%)

1. Physical Exam, Signs & Symptoms
2. Diagnosis & Etiology
3. Diagnostic Procedures
 - a) Cardiopulmonary Assess/Stress Test
 - b) Gait Analysis
 - c) Urodynamics
 - d) Lab Studies
 - e) Medical Imaging
 - f) Neuropsychological Evaluation
 - g) Other Diagnostic Procedures
4. Functional Evaluation
5. Prognosis (Incl. Outcome Measures)

B. Electrodiagnosis (15%)

1. General Electrodiagnosis
2. Instrumentation
3. Nerve Conduction
4. Electromyography
5. Neuromuscular Transmission
6. H Reflex/F Wave

C. Patient Management (32%)

1. Clinical Decision Making (Incl. Ethics)
2. Physical Agents
 - a) Heat/Cryotherapy
 - b) Electrostimulation
 - c) Ultrasound
3. Therapeutic Exercise & Manipulation
 - a) Motor Control
 - b) Mobility and Range of Motion
 - c) Strength and Endurance
 - d) Manipulation and Massage
 - e) Traction/Immobilization

4. Pharmacologic Interventions
 - a) Analgesics
 - b) Antiseizure and Antispasmodics
 - c) Antibiotics
 - d) Psychopharmacologies
 - e) Anti-inflammatory
 - f) Other Medications
5. Procedural/Interventional
 - a) Nerve Blocks
 - b) Anesthetic Injections
 - c) Surgery
 - d) Other Procedural/Interventional
6. Behavioral/Psychological Modalities
 - a) Behavior Modification
 - b) Psychotherapy/Counseling
 - c) Education
 - d) Biofeedback

D. Equipment & Assistive Technology (10%)

1. Prosthetics
2. Orthotics
3. Other Rehabilitation Technology
 - a) Shoes
 - b) Functional Electrical Stimulation
 - c) Transcutaneous Electrical Nerve Stimulation
 - d) Augmentative Communication
 - e) Ventilation
 - f) Wheelchairs/Seating
 - g) Other Devices

E. Applied Sciences (12%)

1. Anatomy
 - a) Central Nervous System
 - b) Peripheral Nerves
 - c) Head/Neck
 - d) Shoulder
 - e) Arm
 - f) Wrist
 - g) Hand
 - h) Hip
 - i) Knee
 - j) Leg

1. Anatomy, cont'd

- k) Ankle
 - l) Foot
 - m) Muscle
 - n) Bone
 - o) Back/Spine: General
 - p) Spine: Cervical
 - q) Spine: Thoracic
 - r) Spine: Lumbosacral
 - s) Other Anatomy
2. Physiology
 - a) Neurophysiology
 - b) Neuromuscular
 - c) Cardiovascular
 - d) Pulmonary
 - e) Genitourinary
 - f) Gastrointestinal
 - g) Skin and Connective Tissue
 - h) Bone and Joints
 - i) Autonomic Nervous System
 - j) Endocrine
 3. Pathology/Pathophysiology
 - a) Neurophysiology
 - b) Neuromuscular
 - c) Cardiovascular
 - d) Pulmonary
 - e) Genitourinary
 - f) Gastrointestinal
 - g) Skin and Connective Tissue
 - h) Bone and Joints
 - i) Autonomic Nervous System
 - j) Endocrine
 4. Kinesiology/Biomechanics
 5. Epidemiology/Risk Factors
 6. Nutrition
 7. Pharmacology
 8. Research & Statistics
 9. Growth & Development