Exam Title: 2000360 Anatomy & Physiology
Courses Assessed by this Exam: Anatomy & Physiology

Key Vocabulary: simple cuboidal epithelium tissue, striated, appendicular skeleton, tibia, temporal bone, mandible, atlas, clavicle, scapula, radius, ulna, femur, fibula, tibia, axial skeleton, femur, sternum, neuromuscular junction, synaptic end bulb, motor neuron, synaptic cleft, motor end plate, neurotransmitter, acetylcholine (ACh), ligand-gated ion channel, voltage-gated Calcium channel, myoneural/ neuromuscular junction, sensory neurons, positive feedback loop, pituitary gland, prolactin, pancreas, insulin, antidiuretic hormone, osmotic pressure, parasympathetic nervous system, sympathetic nervous system, hemoglobin, agglutination, antiserum, ABO Blood groups, antigens, antibodies, Atherosclerosis, pliable, lymphatic system, T-cells, platelets, pulmonary surfactant, gas diffusion, alveoli, pleural cavity, peristalsis, intestinal tract, saliva, bile, bolus, gall bladder, olfactory bulbs, DPT vaccine, pertussis, diphtheria, tetanus, specific immunity, fatty acid, rhinovirus, enzyme, neurotransmitter, lateral malleolus, medial condyle, electron transport chain, glycolysis, Kreb's cycle, lactic acid fermentation, biceps brachii, biceps femoris, latissimus dorsi, pectoralis major, vastus lateralis, rectus femoris, vastus medialis, proprioreceptors, ganglion (bundle of nerves), interneurons (associate neurons), motor (efferent neurons), sensory (afferent neurons), cerebellum, cerebrum, hypothalamus, medulla oblongata, meninges, lipid soluble, water soluble, ducts, lymph cells, cupoidal epithelium, pseudostratified epithelium, squamous epithelium, transitional epithelium, carbonic acid (HCO_3), villi, large and small intestine, cardiovascular disease, ecstasy, marijuana, hypertension, communicable disease, periosteum, abducens, oculomotor, optic, trochlear, fenestrated glomerulus, arteriole, hydrostatic pressure, afferent, efferent, oogonium, oogenesis, polar body, primary oocyte, primary ovum, secondary oocyte, loop of henle, nephron, renal sinus, pathogen, adipocytes, keratinocytes, melanocytes, carbon dioxide transformation, "Blindspot", rods, cones

Student Tasks:

- Know the characteristics and types of various epithelial tissues
- Be able to differentiate between the different types of muscle tissues
- Be able to differentiate between the structures of the appendicular and axial skeleton
- Understand how neurotransmitters and ions are specifically involved in the process of muscular contraction
- Be able to identify the function of a synapse as it pertains to the neuromuscular junction.
- Identify the effects of damage to either sensory or motor neurons
- List examples and be able to explain a positive feedback loop
- Understand the makeup and function of hemoglobin as it relates to the circulatory system
- Understand ABO blood typing and appropriate donors based on blood type

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- Identify the causes, effects, and treatments of atherosclerosis and other cardiovascular diseases
- Know the structures and functions of the lymphatic system
- Be able to identify how volume and pressure changes are involved in the processes of inhalation and exhalation
- Explain the importance of pulmonary surfactants in the process of respiration
- Identify how food is broken down, absorbed, and moved through the digestive tract
- Be able to differentiate between the functions of the sympathetic and parasympathetic nervous systems
- Understand the functions of the autonomic (visceral) nervous system
- Understand the functions of the somatic nervous system
- Understand the difference (including functions) between a sensory and motor neuron
- Understand the function of interneurons
- Define ganglion
- Be able to provide examples of sensory processes
- Understand how aquatic mammals use the process of sonar
- Be able to differentiate between active and passive immunity
- Understand how vaccinations are involved in the immune process
- Differentiate between nonspecific and specific immune responses and be able to provide examples of each.
- Identify the key functions of the four major organic macromolecules
- Be able to differentiate between the tibia and fibula and their structural makeups
- Understand the process of cellular respiration and the efficiency of ATP production involved in each step.
- Know the scientific terminology and location of major muscle groups
- Identify the structure and function of different parts of the brain
- Understand the endocrine system and how endocrine glands function
- Differentiate between water-soluble and lipid soluble hormones
- Understand how anemia relates to cellular respiration
- Identify the negative effects of tobacco use
- Identify best practices in preventing communicable diseases
- Identify the function of the periosteum
- Identify the various cranial nerves and their functions
- Understand how the nephron functions
- Identify the steps of oogenesis
- Understand the process of internal fertilization
- Identify the layers and functions of the skin