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# NURS 6501 ADVANCED PATHOPHYSIOLOGY EXAM NEWEST ACTUAL EXAM WITH COMPLETE QUESTIONS AND CORRECT VERIFIED ANSWERS (DETAILED ANSWERS) ALREADY GRADED A+ 100% GUARANTEED TO PASS CONCEPTS!!

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What causes the release of lysosomal enzymes? - ✓✓ANSWER✓✓-  
>>>>>>>Cellular injury causing cellular self-digestion

What is the location and function of the nucleus? - ✓✓ANSWER✓✓->>>>>>>the  
largest membrane-bound organelle and is found usually in the cell's center. The  
chief functions of the nucleus are cell division and control of genetic information.

What is Cytoplasm? - ✓✓ANSWER✓✓->>>>>>>an aqueous solution (cytosol)  
that fills the space between the nucleus and the plasma membrane.

What is the endoplasmic reticulum and what does it specialize in? -  
✓✓ANSWER✓✓->>>>>>>a network of tubular channels (cisternae) that extend  
throughout the outer nuclear membrane. It specializes in the synthesis and  
transport of protein and lipid components of most of the organelles

What is the Golgi complex and what does it do? - ✓✓ANSWER✓✓->>>>>>>a network of smooth membranes and vesicles located near the nucleus. The Golgi complex is responsible for processing and packaging proteins into secretory vesicles

What are lysosomes and what do they do? - ✓✓ANSWER✓✓->>>>>>>saclike structures that originate from the Golgi complex and contain digestive enzymes. These enzymes are responsible for digesting most cellular substances to their basic form, such as amino acids, fatty acids, and carbohydrates

What are peroxisomes? - ✓✓ANSWER✓✓->>>>>>>involved in the production and breakdown of hydrogen peroxide

Importance of proteins in disease - ✓✓ANSWER✓✓->>>>>>>The major workhorses of the cell, if misfolded they can cause diseases

How are cells specialized? - ✓✓ANSWER✓✓->>>>>>>through the process of differentiation or maturation

What are the eight specialized cellular functions? - ✓✓ANSWER✓✓->>>>>>>movement, conductivity, metabolic absorption, secretion, excretion, respiration, reproduction, and communication

What are the three general components of an eukaryotic cell? - ✓✓ANSWER✓✓->>>>>>>the plasma membrane, the cytoplasm, and the intracellular organelles.

What are mitochondria responsible for? - ✓✓ANSWER✓✓->>>>>>>>.

Mitochondria contain the metabolic machinery necessary for cellular energy metabolism (Makes ATP).

What is the cytoskeleton? - ✓✓ANSWER✓✓->>>>>>>>the "bone and muscle" of the cell. The internal skeleton is composed of a network of protein filaments, including microtubules and actin filaments (microfilaments).

What is the plasma membrane? - ✓✓ANSWER✓✓->>>>>>>>encloses the cell and, by controlling the movement of substances across it, exerts a powerful influence on metabolic pathways

What is signal transduction? - ✓✓ANSWER✓✓->>>>>>>>The transfer of molecular signals from the exterior to the interior of a cell. If not done apoptosis occurs

What is protein regulation and what is it composed of? - ✓✓ANSWER✓✓->>>>>>>>protein homeostasis and is defined by the proteostasis network. This network is composed of ribosomes (makers), chaperones (helpers), and protein breakdown or proteolytic systems. Malfunction of these systems is associated with disease.

What do protein receptors do? - ✓✓ANSWER✓✓->>>>>>>>on the plasma membrane, enable the cell to interact with other cells and with extracellular substances

What means accomplish cell-to-cell adhesions? - ✓✓ANSWER✓✓->>>>>>>>(1) the extracellular membrane, (2) cell adhesion molecules in the cell's plasma membrane, and (3) specialized cell junctions.

What makes up the extracellular matrix and what does it do? - ✓✓ANSWER✓✓-  
>>>>>>>(1) fibrous structural proteins (collagen and elastin), (2) adhesive glycoproteins, and (3) proteoglycans and hyaluronic acid. The matrix helps regulate cell growth, movement, and differentiation.

How do cells communicate? - ✓✓ANSWER✓✓->>>>>>>(1) they form protein channels (gap junctions); (2) they display receptors that affect intracellular processes or other cells in direct physical contact; and (3) they use receptor proteins inside the target cell.

How is intercellular signaling done? - ✓✓ANSWER✓✓->>>>>>>contact-dependent, paracrine, hormonal, neurohormonal, and neurotransmitter.

What is ATP? - ✓✓ANSWER✓✓->>>>>>>Adenosine Triphosphate - ENERGY - is required for active transport.

What is anabolism? - ✓✓ANSWER✓✓->>>>>>>energy-using process of metabolism

What is catabolism? - ✓✓ANSWER✓✓->>>>>>>the energy-releasing process of metabolism

What is passive transport? - ✓✓ANSWER✓✓->>>>>>>The movement of materials across the cell membrane without using cellular energy, water and small electrically uncharged molecules, done through osmosis