Advanced Pathophysiology Midterm 6501 Walden University |Questions and answers with 100% correct solutions | A+ Grade

A runner has depleted all the oxygen available for muscle energy. Which of the following will facilitate his continued muscle performance? ✓✓Answer: Anaerobic glycolysis

What causes the rapid change in the resting membrane potential that initiates an action potential? ✓✓Answer: Sodium gates open, and sodium rushes into the cell, changing the membrane potential from negative to positive.

A 12-year-old male is diagnosed with Klinefelter syndrome. His karyotype would reveal which of the following? ✓✓Answer: XXY

A nurse is reviewing the pedigree chart. When checking for a proband, what is the nurse looking for? ✓✓Answer: The person who is first diagnosed with a genetic disease

An aide asks the nurse why people who have neurofibromatosis will show varying degrees of the disease. Which genetic principle should the nurse explain to the aide? ✓✓Answer: Expressivity

In teaching a patient with cirrhosis, which information should the nurse include regarding cholesterol? ✓✓Answer: Cholesterol decreases the membrane fluidity of the erythrocyte, which reduces its ability to carry oxygen.

When a patient asks what causes cystic fibrosis, how should the nurse respond? Cystic fibrosis is caused by an _____ gene ✓✓Answer: Autosomal recessive

How are potassium and sodium transported across plasma membranes? ✓✓Answer: By adenosine triphosphate enzyme (ATPase)

The nurse would be correct in identifying the predominant extracellular cation as: ✓✓Answer: Sodium

The early dilation (swelling) of the cell's endoplasmic reticulum results in: ✓✓Answer: Reduced protein synthesis

What principle should the nurse remember when trying to distinguish aging from diseases? ✓✓Answer: It is difficult to tell the difference because both processes are believed to result from cell injury.

What is the diagnosis of a 13-year-old female who has a karyotype that reveals an absent homologous X chromosome with only a single X chromosome present? Her features include a short stature, widely spaced nipples, reduced carrying angle at the elbow, and sparse body hair. ✓✓Answer: Turner syndrome

A eukaryotic cell is undergoing DNA replication. In which region of the cell would most of the genetic information be contained? ✓✓Answer: Nucleolus

The nurse is teaching staff about the most common cause of Down syndrome. What is the nurse describing? ✓✓Answer: Maternal nondisjunction

A 50-year-old male was recently diagnosed with Huntington disease. Transmission of this disease is associated with: ✓✓Answer: Delayed age of onset

A patient wants to know the risk factors for Down syndrome. What is the nurse's best response? ✓✓Answer: Pregnancy in women over age 35

What is the role of cytokines in cell reproduction? ✓✓Answer: Provide growth factor for tissue growth and development

A newborn male is diagnosed with albinism based on skin, eye, and hair appearance. Which finding will support this diagnosis? ✓✓Answer: Inability to convert tyrosine to DOPA (3,4 dihydroxyphenylalanine)

Sodium and water accumulation in an injured cell are a direct result of: ✓✓Answer: Decreased ATP production

A nurse is reading a chart and sees the term oncotic pressure. The nurse recalls that oncotic pressure (colloid osmotic pressure) is determined by: ✓✓Answer: Plasma proteins

The ion transporter that moves Na + and Ca 2+ simultaneously in the same direction is an example of which of the following types of transport? ✓✓Answer: Symport

A 20-year-old pregnant female gives birth to a stillborn child. Autopsy reveals that the fetus has 92 chromosomes. What term may be on the autopsy report to describe this condition? ✓✓Answer: Tetraploidy