



قائمة الاسئلة

امتحان نهاية الفصل الدراسي الأول - للعام الجامعي 1446 هـ - كلية الطب والعلوم الصحية :: علم وظائف الأعضاء I المستوى الأول - قسم الطب
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- 1) Dehydration is a process which characterized by fatigue and drowsiness which is developed due to a deficiency of fluids in the
 - 1) - Brain.
 - 2) + Extracellular spaces.
 - 3) - Intracellular spaces.
 - 4) - Kidneys.
- 2) Homeostasis is characterized by
 - 1) - Equilibrium inside the cells.
 - 2) + Maintenance of normal physiology of the human body.
 - 3) - Movement of body fluids into the cells.
 - 4) - Movement of fluid from the cells.
- 3) Regarding the function of cell membrane:
 - 1) + It has a selective permeability function.
 - 2) - It is a part of nucleus.
 - 3) - It is a part of ribosomes biosynthesis.
 - 4) - It is synthesized mitochondria.
- 4) The nervous cells that involved in the formation of blood brain barrier are called
 - 1) + Astrocyte.
 - 2) - Microglia.
 - 3) - Oligodendrocytes.
 - 4) - Phagocytes.
- 5) The mitochondria contain
 - 1) + Mitochondrial DNA
 - 2) - Nuclear DNA.
 - 3) - The extracellular fluid
 - 4) - The intracellular fluid
- 6) A 30-years-old-man was admitted at the hospital with disorders of breathing, investigation found $PACO_2$ 49 mmHg and normal bicarbonates and pH was 7.32 so the clinical diagnosis is
 - 1) - Acute hepatitis.
 - 2) - Cardiac failure.
 - 3) - Renal failure.
 - 4) + Respiratory acidosis.
- 7) When the action potential reaches the nerve terminal it will cause
 - 1) - Depolarization of postsynaptic membrane potential.
 - 2) + Influx of calcium ions.
 - 3) - Postural hypotension
 - 4) - Relaxation of blood vessels.
- 8) The nucleolus function is
 - 1) - Formation of lysosomes.
 - 2) + Formation of ribosomes.
 - 3) - Synthesis of proteins.
 - 4) - Synthesis of RNA.
- 9) Release of neurotransmitters into the synaptic cleft is a
 - 1) - Beta adrenergic dependent process.
 - 2) + Calcium dependent process.
 - 3) - Depended on the plasma sodium levels.



- 4) - Potassium dependent process.
- 10) An elevation of pH and bicarbonate-concentration was 32 mEq/L and PACO₂ was 36 mmHg so the acid base disorder is
- 1) - Complete respiratory acidosis.
 - 2) - Incomplete respiratory disorder.
 - 3) + Metabolic alkalosis.
 - 4) - Renal failure.
- 11) Vomiting in children leads to
- 1) - Acidosis.
 - 2) + Alkalosis.
 - 3) - Convulsions.
 - 4) - Decrease pH.
- 12) Facilitated diffusion is
- 1) + A carrier-mediated transport
 - 2) - A type of active transport.
 - 3) - Required energy of second transported molecules.
 - 4) - Up-hill transport.
- 13) Calcium-magnesium pump is
- 1) - A passive transport.
 - 2) - A transport inside the mitochondria.
 - 3) - A type of endocytosis.
 - 4) + An active transport.
- 14) The intravenous fluids that use for treatment of acute dehydration with hypotension is
- 1) - Hypertonic solutions.
 - 2) + Isotonic solutions.
 - 3) - Manitol.
 - 4) - Sugar-alcoholic solutions.
- 15) The complication of plasma-hyperosmolarity is
- 1) - Heart failure
 - 2) + Dehydration.
 - 3) - Hepatic failure
 - 4) - Death
- 16) Alkalosis is characterized by an increase in the
- 1) + Bicarbonate-concentration in the plasma
 - 2) - Hemoglobin.
 - 3) - Plasma potassium concentration
 - 4) - Plasma sodium levels.
- 17) During depolarization in the nerve fiber, the ions which will diffused into the intracellular space is called
- 1) - Bicarbonates.
 - 2) - Calcium.
 - 3) - Potassium.
 - 4) + Sodium.
- 18) Antidiuretic hormone (ADH) is working during
- 1) - Constipation.
 - 2) - Hyperthyroidism.
 - 3) - Overhydration.
 - 4) + Severe vomiting.
- 19) An elevation of the uterine contraction is required elevation of oxytocin levels, this homeostatic mechanism is





- 1) - Autonomic controlled mechanism.
 - 2) - Negative feedback mechanism.
 - 3) Positive feedback mechanism.
 - 4) - Somatic nervous system controlled mechanism.
- 20) The process of detoxification of toxic substances is performed in the
- 1) - Cellular envelop.
 - 2) - Mitochondrial matrix.
 - 3) - Presence of sodium ions.
 - 4) Smooth endoplasmic reticulum
- 21) Active transport across the cell membrane needs to presence of
- 1) - Activation of peroxisomes.
 - 2) - Cytoplasmic lysosomes.
 - 3) Metabolic energy.
 - 4) - Release of oxytocin hormone from the posterior pituitary gland.
- 22) The pressure which controls osmosis is called
- 1) - Arterial preasure.
 - 2) - Hydrostatic pressure.
 - 3) - Oncotic pressure.
 - 4) Osmotic pressure.
- 23) The plasma pressure which is made by plasma-proteins is called
- 1) - Plasma potassium-dependent pressure.
 - 2) Plasma oncotic pressure.
 - 3) - Plasma hydrostatic pressure.
 - 4) - Plasma osmotic pressure.
- 24) Plasma hyperosmolarity is appered due to an increment in the
- 1) - Calcium levels.
 - 2) - Plasma enzymes levels.
 - 3) Plasma sodium levels.
 - 4) - thyroxin levels.
- 25) Completed metabolic acidosis is characterized by a decrease in the
- 1) - Arterial carbonic dioxide.
 - 2) - Hemoglobin levels.
 - 3) Plasma bicarbonate levels.
 - 4) - Plasma potassium levels.
- 26) The troponin-complex is an intracellular structure which is lined in the
- 1) Cardiac muscles.
 - 2) - Smooth muscle.
 - 3) - Stomach muscles.
 - 4) - Urinary bladder muscle.
- 27) Neutrophilia is process which appears during
- 1) Acute bacterial infection in the human body.
 - 2) - Acute viral infection.
 - 3) - Chronic bacterial infection.
 - 4) - Chronic inflammation of the bone like tuberculosis.
- 28) The function of leukocytes is
- 1) Defense against infections.
 - 2) - Stop of bleeding.
 - 3) - Transport of carbonic dioxide.
 - 4) - Transport of plasma proteins.





- 29) A clinical case (22-years-old-girl) has been referred to the Al-Thawra General hospital with clinical diagnosis of COVID-19 so the hematological markers showed
- 1) - Hemoglobin-disorders.
 - 2) Neutropenia with lymphocytosis.
 - 3) - Neutrophilia.
 - 4) - Thrombocytopenia.
- 30) Transport of oxygen in the blood is performed in the presence of
- 1) - Basophils.
 - 2) - Eosinophils.
 - 3) Erythrocytes.
 - 4) - Monocytes.
- 31) The pressure which exerts against the wall of the blood vessels is called
- 1) Blood hydrostatic pressure.
 - 2) - Plasma colloid pressure.
 - 3) - Plasma oncotic pressure.
 - 4) - Plasma osmotic pressure.
- 32) After birth, the born baby appears with yellowish skin (in the period of the first 28 days after birth) this kind of yellowish skin (jaundice) is called
- 1) - Congenital jaundice due to common bile-duct obstruction.
 - 2) - Hepatic failure.
 - 3) - Hepatic jaundice.
 - 4) Physiological neonatal jaundice.
- 33) During allergic reaction, the hematological parameters will be appeared as a
- 1) Eosinophilia.
 - 2) - Leukocytosis.
 - 3) - Lymphocytosis.
 - 4) - Neutropenia.
- 34) Anemia is a deficiency in the
- 1) Red blood cells.
 - 2) - Plasma proteins.
 - 3) - Plasma sodium levels.
 - 4) - Leukocytes.
- 35) Lymphocytosis is sign of
- 1) - Acute allergic reactions.
 - 2) - Acute bacterial infection.
 - 3) - Acute renal failure.
 - 4) Chronic bacterial infection.
- 36) A-2-years-old-baby has been admitted at the Al-Sabeen Hospital with 2 days duration of vomiting so the acid-base disorders which will be developed is called
- 1) Alkalosis.
 - 2) - Complete metabolic acidosis.
 - 3) - Incomplete metabolic acidosis.
 - 4) - Respiratory acidosis.
- 37) Exocytosis is process of which called
- 1) - A passive transport into the mitochondria.
 - 2) - Cell eating.
 - 3) Transport from the cell into extracellular spaces.
 - 4) - Transport of large molecules into the inside of the cell.
- 38) A-pregnant woman was admitted at the hospital with severe vomiting so the acid-base disorder that was





developed in that leady is called

- 1) - Acidosis.
- 2) Alkalosis.
- 3) - Dropping of pH.
- 4) - Elevation of CO₂.

39) During bleeding (in the living human body), the homeostatic mechanism that leads to stop bleeding is called

- 1) - A dropping in the erythrocyte-counting.
- 2) A positive homeostatic feed-back mechanism.
- 3) - An elevation in the total number of red blood cells.
- 4) - Elevation of total white blood cell-counts.

40) The function of mitochondria is

- 1) Formation of ATP.
- 2) - Formation of blood-brain-barrier.
- 3) - Formation of proteins.
- 4) - Transport of blood gases.