لجنة الطب البشري

فكرة تحيا على نبض قلوبكم

Physiology

Last Year

EXAM

2009

مع تمنياتنا لكم بالتوفيق

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1- All of the following statements abut the Na^+ / K^+ pump are true, EXCEPT:

- It connect Na^+ inside the cell

2- The rate of diffusion a cross a cell membrane could be increased by increasing the:

- Concentration gradient (difference in concentration) across the membrane.

3- Which of the following solution is considered as isotonic to human cells (it intracellular osmolarity is 280 – 300mosmole/L)?

- Solution contains 50 grams of glucose / liter

4- Which of the following body water compartments correspond to Claude Bernard's "milieu internale" (internal environment)?

- Extra-cellular fluid

5- Both simple diffusion and facilitated diffusion:

- Can work in the absence of adenosine triphosphate (ATP)

6- Facilitated diffusion:

- Saturate at high solute concentration

7- Which of the following body water spaces will have the smallest volume in a normal person?

- Plasma

8- Which of the following substances or combination of substances could be used to measure interstitial fluid volume?

- Inuln and Evans blue dye

9- Which of the following statements, regarding cell membrane, is <u>TRUE</u>?

- Urea can cross cell membrane by cell diffusion

10- Which of the following is an example of positive feedback control mechanism?

- During labor, uterine contractions leading to cervical stretch which causes series of reactions that further increase in uterine contractions.

11- Edema of heart failure is due to:

- Increased hydrostatic pressure in the capillaries

12- A male patient, of 100 kg weight and body fluid osmolarity of 300mosmol/L developed diabetes insipidus, he lost 3 liter of urine (of 100 mosmol/L) and did not drink water. Which one of the following changes is TRUE?

- Osmolarity of body fluid will be increased to 310 mosmol/L

13- Low density lipoprotein (LDL) is transported into the cell through:

- Receptor-mediated endocytosis

14- In different human cells the energy stored in ATP is directly used to:

- Transport Na outside muscle cells

15- Edema can produce by all of the following EXCEPT:

- Increased plasma protein concentration

16- When only water is lost from the ECF (not accompanied by solutes loss)?

- Osmosis moves water from the ICF to the ECF

17- Compared with intracellular fluid, extra-cellular fluid has:

- A lower hydrogen ion concentration

18- Inhibition of the Na^+/K^+ pump will cause a DECREASE in the intracellular concentration of:

- Potassium

19- Regarding glucose movement, across cell membrane, which of the following is a TRUE statement?

- The facilitated diffusion system for glucose can transport glucose out of epithelial cells of intestine.

20- All of the following about resting membrane potential are wrong EXCEPT:

- It is essential for cell excitation

21- All of the following factors play a role in the genesis of resting membrane potential EXCEPT:

- Na-Ca exchange which is 4:3

22- Saltatory conduction is characterized by all of the following EXCEPT:

- Usually has large amplitude action potential

23- Which of the following is not a step in the neuromuscular transmission?

- Increase Na-K pump activity

24- Myasthenia gravis patients can be relieved by:

- Drug physistogmine

25- Serial (Local current flow) conduction compared to saltatory conduction:

- Consumes more energy to restore resting conditions

26- Which of the following blocks transmission in the neuromuscular junction by causing explosive release of ACh:

- Black spider venom

27- Which of the following inhibits Acetylcholinesterase irreversibly?

- Military Nerve gases

28- Which of the following is wrong about nerve trunk?

- All neurons have the same threshold level

29- All of the following sentences are correct EXCEPT:

- Both synapses and neuromuscular junctions can be inhibitory or excitatory

30- All of the following are common steps between synaptic and neuromuscular transmission EXCEPT:

- Acetylcholine is broken down by acetylcholine esterase only in neuromuscular junction.

We need a physicians of spirit and essences, spirit and reality, physicians whose heart are open to all fields of knowledge and all spiritual inspirations and divine blessings. In short, we need whole comprehensive minds ...