

1. If you want to prepare isotonic solution of Na_2SO_3 , which concentration would be the best :

- A. 200 mOsm
- B. 300 mOsm
- C. 150 mOsm
- D. 500 mOsm
- E. 100 mOsm

2. One of the following is true about positive feedback :

- A. If an action decrease the response will increase
- B. opening Na^+ channels is an example of positive feedback
- C. keeping the arterial blood pressure in a normal range is an example of positive feedback

3. In the SA nodal action potential , which phase should be faster to cause tachycardia ?

- A. phase 0
- B. phase 1
- C. phase 2
- D. phase 3
- E. phase 4

4. In the action potential for the SA node , in which phase the number of positive charge entering is more than the number of positive charge leaving :

- A. phase 0
- B. phase 1
- C. phase 2
- D. phase 3
- E. phase 4

5. During the action potential for SA nodal cell in the heart , the permeability change for :

- A. Na^+
- B. Na^+ , Ca^{++}
- C. Na^+ , Ca^{++} and K^+
- D. Na^+ , K^+
- E. Na^+ , Cl^-

6. About Schizophrenia ,which one is true :

- A. caused by dopamine increase
- B. related to chromosome 11
- C. has no treatment
- D. the patient suffer hallucination

7. After the action potential happen :

- A. $[\text{K}^+]$ increase 1% in the extracellular fluid
- B. $[\text{K}^+]$ decrease 1% in the intracellular fluid
- C. $[\text{Na}^+]$ increase 1% in the intracellular fluid
- D. both $[\text{Na}^+]$ and $[\text{K}^+]$ changes won't be more than 1%
- E. $[\text{Ca}^{++}]$ increase 1% in the extracellular fluid

8. About the body fluids , intracellular share with extracellular :

- A. number of cations
- B. concentration of protons
- C. osmolarity
- D. volume of the body

9. The highest permeability through a biological membrane is :

- A. albumin
- B. Na⁺
- C. Glucose
- D. O₂
- E. CO₂

10. Which of the following affects the " colloid osmotic pressure " :

- A. Na⁺
- B. albumin
- C. Glucose

11. about Saturday night syndrome , all the following are true except :

- A. the patient would have wrist drop
- B. someone with stabs in the brachial plexus may have it
- C. multi peak CAMP
- D. normal CAMP
- E. A person could suffer from this if he uses crutches

12. One of the following does not happen when you are stressed :

- A. activated hypothalamus
- B. increase blood pressure
- C. increase the heart rate
- D. increase glucose in the blood
- E. increase the gastric secretion

13. The enzyme that break down norepinephrine in the tissue :

- A. Catechol -O- methyl transferase
- B. monoamine oxidase
- C. acetylcholine esterase
- D. amphetamine
- E. botox

14. The glutamate receptors can bind to all of the following except :

- A. glycine
- B. magnesium
- C. GABA
- D. zinc
- E. glutamate

15. All the following are caused by vagotomy except :

- A. decrease the motility and secretion
- B. increase the heart rate
- C. constipation and slow digestion
- D. decrease the heart rate

16. All the following are used to treat axillary hyperhidrosis except :

- A. botox injection
- B. hyponosis
- C. cholinergic drug
- D. endoscopic thoracic sympsectomy
- E. ant perspiration

17. CGMP dependent protein kinase convert :

- A. ATP to CAMP
- B. CGMP to GTP
- C. CAMP to GTP
- D. GTP to CAMP
- E. GTP to CGMP

18. One of the following has a receptor on the cell membrane :

- A. cortisol
- B. vitamin D
- C. Insulin
- D. thyroid
- E. NO

19. Calcium – calmodulin is :

- A. hormone
- B. Ca binding protein

20. The IP3 function is :

- A. activate phospholipase C
- B. activate protein kinase C to phosphorylate protein
- C. binds to receptor on ER to release Ca^{++}
- D. stimulate G-protein

21. Which of the following is used to suppress pain :

- A. norepinephrine
- B. enkephaline
- C. NO
- D. Glutamic acid

22. One of the following will happens if you use diuretic drug :

- A. hyper-osmotic , dehydration
- B. hypo-osmotic , dehydration
- C. hypo-osmotic , over hydration

study well ☺

دعاءنا لكم بالتوفيق ☺..... لجنة سنة أولى ☺

LEJAN