



Department of physiology

Time allowed: Three hours

Total marks: 30

Physiology

MSC of Neurosurgery

Tanta University

Faculty of Medicine

Code: NEUROS 8002

Date: 19 /8/ 2021

All the questions must be answered:

1. State : Functions of thalamus. (5 marks)
2. Mention : Causes of headache. (5 marks)
3. State : Functions of vestibulocerebellum. (5 marks)

All the following must be answered by only one choice (15 marks)

1. Which of the following is function of insulin:

- | | |
|--------------------------------|------------------------------------|
| a. Stimulate lipolysis. | c. Promote protein anabolism. |
| b. Promote protein catabolism. | d. Increase blood potassium level. |

2. Hemophilia is characterized by :

- | | |
|----------------------------------|---------------------------------|
| a. Prolonged bleeding time. | c. Prolonged coagulation time. |
| b. Decrease number of platelets. | d. Abnormal platelet function . |

3. Which of the following contain muscarinic receptors:

- | | |
|-----------------------|------------------------|
| a. Adrenal medulla. | c. Eccrine sweat gland |
| b. Autonomic ganglia. | d. Motor end plate. |

4. Stimulation to beta 2 adrenergic receptors induce :

- | | |
|---------------------------------|----------------------------|
| a. Bronchoconstriction. | c. Coronary vasodilatation |
| b. Increase gastric secretion . | d. pupil constriction. |

5. Cyanotic threshold normally equal:

- a. 5 gm % arterial blood.
- b. 5 gm % capillary blood.
- c. 5 mg % arterial blood.
- d. 5 mg % capillary blood.

6. Visceral pain is characterized by:

- | | |
|-------------------------------------------|--------------------------------------|
| a. Never referred. | c. Well localized |
| b. Rigidity of overlying skeletal muscle. | d. Induce flexion withdrawal reflex. |

7. Venous return is decreased by:

- | | |
|----------------------------------|---------------------------------------------|
| a. Vasodilatation of arterioles. | c. Increase negative intrapleural pressure. |
| b. Venodilatation. | d. Venoconstriction |

Look to back

- 8- Which of the following induced by stimulation of alpha 1 adrenergic receptors :
- Increase heart rate .
 - Bronchoconstriction.
 - Vasoconstriction to blood vessels.
 - Bronchodilatation.
- 9- Which of the following could stimulate aldosterone secretion:
- Hypervolemia.
 - Hypoproteinemia.
 - Increase blood potassium level.
 - Decrease blood potassium level.
- 10- Which of the following is function of heparin :
- Antiprothrombin.
 - Activate prothrombin.
 - Inhibit activity of platelets.
 - Inhibit activity of vitamin K.
- 11- Which of the following could increase capillary permeability:
- Acidity of blood.
 - Alkalinity of blood.
 - Increase plasma protein level.
 - Increase blood calcium level.
- 12- Increase arterial blood pressure could induce which of the following.
- Increase end diastolic volume.
 - Increase heart rate.
 - Increase secretion of aldosterone.
 - Increase secretion of antidiuretic hormone.
- 13- Which of the following could increase peripheral vascular resistance :
- Anemia.
 - Vasodilatation of arterioles.
 - Increase heart rate.
 - Increase blood viscosity.
- 14- Which of the following could induce metabolic acidosis:
- Restrictive lung disease.
 - Hyperventilation.
 - Hypoventilation.
 - Renal failure.
- 15- Which of the following is CORRECT as regard blood PH:
- Inversely proportionate with arterial HCO_3 .
 - Directly proportionate with arterial PCO_2 .
 - Normally equal 7.1 for arterial blood.
 - Directly proportionate with arterial HCO_3 .

إمتحان الشفهي يوم السبت 2021/8/28 في قسم الفسيولوجي التاسعة صباحا