

Diploma Degree

All questions are to be answered, 15marks for each question

1. Discuss types ,mechanism of action , indications and contraindications of magnetic therapy.
2. Give an account on diadynamic currents.
3. Discuss methods of transmission of heat with enumeration of example for each method.

Best wishes.



Department of physiology

Time allowed: Three hours

Total marks: 45

Physiology

Diploma Physical Medicine

Tanta University

Faculty of Medicine

Code: PRR 8001

Date: 28 /2/2022

All the questions must be answered:

- 1- Discuss : Functions of basal ganglia. (10 marks)
- 2- State: Manifestations of complete spinal cord transection. (10 marks)
- 3-Discuss : Mechanism and significance of oxygen debt. (10 marks)

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

1- Sympathetic stimulation could induce:

- | | |
|--------------------------------|-------------------------|
| a. Miosis. | c. Bronchoconstriction. |
| b. Increase gastric secretion. | d. Pupil dilatation . |

2- Which of the following could induce cyanosis:

- | | |
|----------------------|------------------------|
| a. Stagnant hypoxia. | c. Histotoxic hypoxia. |
| b. CO poisoning. | d. Anemic hypoxia. |

3- Blood group AB is characterized by:

- a. Absence of A and B agglutinin on RBCs.
- b. Presence of alpha and beta agglutinin in plasma.
- c. Presence of A and B agglutinin on RBCs .
- d. It is universal donor.

4- Which of the following Induce coronary vasodilatation :

- | | |
|----------------------------|---|
| a. Vagal stimulation. | c. Increase cardiac metabolic activity. |
| b. Muscarinic stimulation. | d. Stimulation of alpha 1 adrenergic receptors. |

5- Which of the following could induce edema:

- | | |
|---|------------------------------------|
| a. Decrease capillary hydrostatic pressure. | c. Vasoconstriction of arterioles. |
| b. Increase capillary hydrostatic pressure. | d. Increase plasma protein level. |

6- Which of the following help platelet aggregation in haemostasis:

- | | |
|---------------------------|----------------|
| a. Prothrombin activator. | c. Thrombin. |
| b. Thromboxan A2. | d. Fibrinogen. |

7- Which of the following is CORRECT regarding peripheral chemoreceptors:

- | | |
|--|---|
| a. Its stimulation induce bradycardia. | c. Mainly stimulated by alkalosis. |
| b. Mainly stimulated by hypoxia. | d. Its stimulation decrease respiratory rate. |

Look to back

8- Pain sensation is characterized by which of the following :

- a. Its receptors are rapidly adapted .
- b. Its receptors are moderately adapted.
- c. Its receptors are free nerve endings.
- d. Carried by dorsal column of the spinal cord.

9- Glucocorticoids could decrease blood level of :

- a. Free fatty acids.
- b. Glucose.
- c. Eosinophils.
- d. RBCs.

10- Which of the following is CORRECT regarding referred pain :

- a. Could explained by dorsal root branching mechanism.
- b. Could explained by convergence facilitation mechanism.
- c. Never occur with visceral pain.
- d. Always occur with cutaneous pain.

11- Which of the following could increase heart rate:

- a. Stimulation to beta 1 adrenergic receptors.
- b. Venodilatation.
- c. Stimulation to muscarinic receptors.
- d. Stimulation to arterial baroreceptors.

12- Intrinsic mechanism of blood coagulation is initiated by:

- a. Contact with rough surface.
- b. Injury to blood vessels.
- c. Activation of factor X.
- d. Activation of factor VII.

13- Vasodilatation of arterioles could induce :

- a. Increase peripheral vascular resistance.
- b. Decrease venous return.
- c. Decrease central venous pressure.
- d. Decrease peripheral vascular resistance .

14- Which of the following could induce respiratory alkalosis:

- a. Restrictive lung disease.
- b. Renal failure.
- c. Hypoventilation.
- d. Hyperventilation.

15- Which of the following is CORRECT as regard blood PH:

- a. Inversely proportionate with arterial HCO_3^- .
- b. Directly proportionate with arterial PCO_2 .
- c. Directly proportionate with arterial HCO_3^- .
- d. Normally equal 7.1 for arterial blood.

إمتحان الشفهي يوم الثلاثاء 2022/3/ 1 في قسم الفسيولوجي التاسعة صباحا



PHYSICAL MEDICINE

All questions should be answered

- 1- **Discuss** the branches and applied anatomy of the vagus nerve.
(12 marks)
- 2- **Discuss** with an illustration the external features of the medial surface of the cerebral hemisphere.
(12 marks)
- 3- **ENUMERATE** the movements occur in the knee joint and mention the muscles responsible for each movement and their nerve supply.
(12 marks)
- 4- **WHAT** are the joints connecting the second and third lumbar vertebrae and describe these joints?
(12 marks)
- 5- **COMPARE** between the flexor and extensor retinacula of the wrist joint as regards their attachment, deep relations and clinical importance.
(12 marks)

END OF THE EXAM

NB: Oral and Practical Examination: Just after the end of written exam on the same day at 2nd floor at Anatomy department

WITH BEST WISHES

Committee of the exam: *Prof. Dr. Amal Halawa, Prof. Dr. Mohamed ElSeidy
Prof. Dr. Morsy Aboelgoud*