

Date:18/2/2018  
Examination For Diploma Cardiology  
Term: Final  
Course Title: Physiology  
Time Allowed: Three Hours

Tanta University  
Faculty Of Medicine  
Department Of Physiology  
Course Code: CARD 7001  
Total Assessment Marks: 30

**All questions are to be answered:**

1-Discuss arterial blood pressure and pathophysiological basis of hypertension. (10 marks)

2- Cardiac reserve and its mechanisms. (10 marks)

**3-Choose the most probable answer: (10 marks)**

**1-The active form of vitamin D is:**

- a)1,25-dihydroxycholecalciferol
- b)Is formed in the absence of parathormone
- c)Decrease the absorption of calcium from the intestine
- d)Can be formed by the liver

**2-Infantile thyroid deficiency is characterized by all of the following Except:**

- a)Retarded growth and delayed walking
- b)Protruded tongue and abdomen
- c)Moon face and buffalo hump
- d)A low basal metabolic rate and inability to tolerate cold weather

**3-The heart rate is regulated by:**

- a)Impulses from the baroreceptors
- b)Changes in the arterial blood pressure
- c)O<sub>2</sub> and CO<sub>2</sub> pressure
- d)All of the above

**4-The systolic blood pressure of the left ventricle is:**

- a)130mmHg
- b)100mmHg
- c)15mmHg
- d)80 mmHg

**5-Prolonged coagulation time in obstructive jaundice is due to:**

- a)Deficiency of bile pigments
- b)Decrease the formation of plasma protein
- c)Vitamin K deficiency
- d)iron deficiency

**6-All the following organs share in vitamin D formation Except:**

- a)The lung
- b)The liver
- c)The kidney
- d)The skin

**7-Absolute refractory period is shortened by the following Except:**

- a)Increase of the temperature
- b)Beta blockers
- c)Sympathetic stimulation
- d)Increase the heart rate

**8- Atropine is acting as:**

- a)Muscarinic blocker
- b)Nicotinic blocker
- c)Neuromuscular blocker
- d)None of the above

**9-Gastric emptying is delayed by:**

- a)Vagal stimulation
- b)Excess fat and hypertonic sugar solutions in the duodenum
- c)Increase of the fluidity of gastric chyme
- d)Small size diet

**10-Cortisone increases the blood glucose level by:**

- a)Increasing the gluconeogenesis
- b)Exerts insulin like effect on the skeletal muscles
- c)Decrease glucose absorption from the intestine
- d)Produces osteoporosis

**11- Platelets deficiency resulted in:**

- a) Prolonged coagulation time
- b) Purpura
- c) Haemophilia
- d) Anemia

**13--The following hormones elevate the arterial blood pressure Except:**

- a) Vasopressin(ADH)
- b) Angiotensin II
- c) Aldosterone
- d) Histamine

**15-Hyperalgesia**

- a) It is a physiological condition
- b) Primary hyperalgesia is due to lesion inside the brain
- c) The pain threshold is lowered in the primary hyperalgesia
- d) Occurs in the healthy skin

**17- Keeping internal environment constant is called:**

- a- Thermostasis
- b- Hemostasis
- c- Homeostasis
- d- Pinocytosis

**19- Cyanosis is present in:**

- a) All types of anemia
- b) Histotoxic hypoxia
- c) Congestive heart failure
- d) Met-hemoglobinemia

**12-Pain control mechanism release the following hormones Except:**

- a) Beta endorphin
- b) Enkephalin
- c) Serotonin
- d) Bradykinin

**14- Hyperglycemia occurs in all the following Except:**

- a) Thyrotoxicosis
- b) Diabetes insipidus
- c) Acromegaly
- d) Cushing's Syndrome

**16-The following factors are essential for erythropoiesis :**

- a) Iron
- B) Vitamin B<sub>12</sub>
- c) Healthy bone marrow
- d) All of the above

**18-Conduction velocity of Purkinje fibers is:**

- a-5 meters /minute
- b-5 meters/second
- c-5 centimeter /minute
- d-3 meter /second

**20-Atrial flutter is:**

- a-Physiological condition
- b-The atrial contraction is not present
- c-Rhythmic heart block 2:1 rhythm is present
- d-Atrial rate exceed 400 beat/ minute

الامتحان الشفوي يوم الأربعاء ٢٠١٨/٢/٢٨ الساعة الثامنة والنصف صباحا بقسم الفسيولوجي

Tanta university  
Faculty of medicine  
Department of medical biochemistry

Date: 18/2/2018

**1<sup>st</sup> Part Medical Biochemistry Diploma Cardiology Exam**

**1- Give an account on cholesterol biosynthesis with reference to the rate limiting step and drug affecting it?**

**2-Discuss the clinical significance of CPK and LDH isoenzymes as cardiac biomarkers?**

**Good luck**

سيتم انعقاد الامتحان الشفوي بمشيئة الله يوم الاربعاء الموافق 2018/2/28 الساعة العاشرة  
بالقسم