



Department of physiology

Time allowed: Three hours

Total marks: 45

Physiology

Diploma of Internal Medicine

Tanta University

Faculty of Medicine

Code: MED 8002

Date: 23 /2/ 2022

**All the questions must be answered:**

**1- Discuss : Pathophysiology of heart failure. (10 marks)**

**2- Discuss : Factors affecting gas exchange across respiratory membrane . (10 marks)**

**3- Mention functions of : a. Thyroid hormones. (5 marks)**

**b. Gall bladder. (5 marks)**

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

**1- Sympathetic stimulation could induce:**

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

**2- Which of the following could induce cyanosis:**

- a. Stagnant hypoxia.
- b. CO poisoning.
- c. Histotoxic hypoxia.
- 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.
- b. Muscarinic stimulation.
- c. Increase cardiac metabolic activity.
- d. Stimulation of alpha 1 adrenergic receptors.

**5- Which of the following could induce edema:**

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

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

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

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

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

**Look to back**

- 8- Pain sensation is characterized by which of the following :**
- Its receptors are rapidly adapted .
  - Its receptors are moderately adapted.
  - Its receptors are free nerve endings.
  - Carried by dorsal column of the spinal cord.
- 9- Glucocorticoids could decrease blood level of :**
- Free fatty acids.
  - Glucose.
  - Esinophils.
  - RBCs.
- 10- Which of the following is CORRECT regarding referred pain :**
- Could explained by dorsal root branching mechanism.
  - Could explained by convergence facilitation mechanism.
  - Never occur with visceral pain.
  - Always occur with cutaneous pain.
- 11- Which of the following could increase heart rate:**
- Stimulation to beta 1 adrenergic receptors.
  - Venodilatation.
  - Stimulation to muscarinic receptors.
  - Stimulation to arterial baroreceptors.
- 12- Intrinsic mechanism of blood coagulation is initiated by:**
- Contact with rough surface.
  - Injury to blood vessels.
  - Activation of factor X.
  - Activation of factor VII.
- 13- Vasodilatation of arterioles could induce :**
- Increase peripheral vascular resistance.
  - Decrease venous return.
  - Decrease central venous pressure.
  - Decrease peripheral vascular resistance .
- 14- Which of the following could induce respiratory alkalosis:**
- Restrictive lung disease.
  - Renal failure.
  - Hypoventilation.
  - Hyperventilation.
- 15- Which of the following is CORRECT as regard blood PH:**
- Inversely proportionate with arterial  $\text{HCO}_3$ .
  - Directly proportionate with arterial  $\text{PCO}_2$ .
  - Directly proportionate with arterial  $\text{HCO}_3$ .
  - Normally equal 7.1 for arterial blood.

**Tanta University**  
**Faculty of Medicine**  
**Department of Medical Biochemistry**

**First Part Examination for Diploma Degree in Internal Medicine**  
**Medical Biochemistry Exam**

**Date: 23/2/2022**

**All questions should be answered**

**Write short notes on the following items**

1. Polymerase chain reaction and its usage
2. Biochemical changes in type 2 diabetes mellitus
3. Jaundice with highlighting the biochemical changes occur in each type.

**Good luck**

تنبيه هام : سوف يعقد الإختبار الشفوى بالقسم بعد الإمتحان النظري مباشرة في نفس

اليوم الأربعاء الموافق 2022 /2/23

Examination for Diploma Degree in: Internal Medicine  
Course Title: Microbiology & Immunology  
Date: 26/ 2 /2022  
Term: 1<sup>st</sup> part  
Time Allowed: 3 hours (with pathology & clinical pathology)  
Total Assessment Marks: 45  
All questions to be answered



Tanta University  
Faculty of Medicine  
Department of Microbiology  
and Immunology

Q1: Enumerate:

- a) Explain Methods used for testing the efficiency of autoclave. (2 marks)
- b) Mechanisms of antimicrobial drug resistance (3 marks)

Q2: Give short account on the following (4 marks each)

- a) Steps of phagocytosis
- b) Factors influencing antigenicity or immunogenicity
- c) Discuss the mechanism of anaphylactic hypersensitivity reaction

Q3: (3 marks)

COVID-19 is a pandemic disease affecting millions of peoples around world , it is transmitted by droplet infection, according to this mention other routes of disease transmissions then mention main items of droplet based precautions to reduce COVID 19 transmission

Q4: (5 marks)

Define Septicemia then mention the most common organisms isolated from blood cultures of septicemic patient.

Q5: Discuss the following: (5 marks each)

- a) Methicillin resistance Staphylococcus aureus (MRSA)
- b) Clinical forms of Anthrax

Q 6: Discuss the following

- a) Laboratory diagnosis for human influenza virus (4 marks)
- b) Indication for vaccination against Hepatitis B virus (3 marks)
- c) Laboratory diagnosis of candida infection (3 marks)

Chairman of Department  
Prof Dr. Mohamed Zakaria



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Tanta University  
Faculty of Medicine  
Clinical Pathology Department  
February, 26 2022



Diploma Internal Medicine  
Clinical Pathology Department  
Total Marks: 45  
Time Allowed: 1 Hour

**Give short account on: (7.5 each)**

- A) **Laboratory diagnosis of chronic lymphocytic leukemia.**
- B) **Diagnostic approach for a case of thrombocytopenia.**
- C) **Macrocytic anemia: etiology and laboratory diagnostic approach.**
- D) **Types and clinical significance of hepatitis B serological markers.**
- E) **Types and causes of proteinuria.**
- F) **Causes and laboratory diagnosis of hypothyroidism.**

ملحوظة: لجنة الشفوي يوم الاثنين 28 / 2 / 2022

لجنة الممتحنين:

أ.د. جيهان الشرنوبى

أ.د. محمد طارق

Examination for Diploma Degree in: Internal Medicine  
Course Title: Microbiology & Immunology  
Date: 26/ 2 /2022  
Term: 1<sup>st</sup> part  
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Chairman of Depa. lment  
Prof Dr. Mohamed Zakaria



Examination for Diploma Degree in: Internal medicine  
Course Title: MED 7003 Path  
Date: 26-2-2022  
Time Allowed: one hours  
Total Assessment Marks: 45



Tanta University  
Faculty of Medicine  
Department of:  
Pathology

Questions numbers	Marks
<b>Q1: Give an account on:</b>	<b>(20)</b>
1- Causes and sites of thrombosis.	10
2- Types of tuberculous peritonitis.	5
3- Types of emboli.	5
<b>Q2: Discuss the predisposing factors, gross &amp; microscopic features of HCC.</b>	<b>(10)</b>
<b>Q3: Give an account on:</b>	<b>(15)</b>
1- Complications of typhoid fever.	5
2- Membranoproliferative glomerulonephritis (etiology, pathologic features, immunofluorescence, electron microscopy and prognosis).	10

يعقد الامتحان الشفوي يوم الأثنين الموافق ٢٠٢٢/٣/٧ الساعة العاشرة صباحا بالقسم

**Examination Committee:**

**Prof Dr. Samir Mena**

**Prof. Dr. Zeinab El-Gendy**

**Prof. Dr. Maha Shamlola**

**Prof. Dr. Mona Abd El-Haq**

**Prof. Dr. Ayman El-Saka**

**Ass. Prof. Dr. Asmaa Bedeer**