

**Tanta University
Faculty of Medicine
Microbiology and Immunology department**

Examination of Microbiology and Immunology

For master degree of Emergency Medicine

Date: 20-2-2017

Total marks: 90

1-Enumerate methods for sterilization and discuss one of them in details.(20 mark)

2-Give an account on mechanism of action of antimicrobial agents.(10mark)

3- Give an account on typeI hypersensitivity reaction.(10 mark)

4- Give an account on causative organisms,pathogenesis,clinical picture,mode of infection, diagnosis,prophylaxis,and treatment of Gas gangrene. (35 mark)

5-Give an account on parentally transmitted hepatitis viruses.(15mark)



Date:13/2/2017
Examination For MSC Emergency Medicine
Term: Final
Course title: Physiology
Time Allowed: Three Hours

Tanta University
Faculty Of Medicine
Department Of Physiology
Course Code: EMRT 8001
Total Assessment Marks: 90

All questions are to be answered:

- 1-Discuss types of hemorrhage and shock. (30marks)
- 2-Give short account on anemia and hemorrhagic disorders. (20 marks)
- 3-Discuss lung surfactant and factors affecting it. (20 marks)

3 -Choose the most probable answer: (20 marks)

1-All of the following increase the cardiac output Except:

- a)Increased end diastolic volume
- b)Increased venous return
- c)Moderate increase in the heart rate
- d)Acidosis

3- Acidosis is present in the following conditions:

- a) Excessive ingestion of alkaline drinks
- b)Diabetes insipidus
- c) Diabetes mellitus
- d)Non of the above

5-The dead space has the following functions Except:

- a)Is functioning as an air conditioner
- b)Its volume is about 150 ml
- c)Parasympathetic stimulation increase it
- d)It has a defensive function in the respiratory system

7-The volume of gas in the lung after forced expiration is:

- a)Residual volume
- b)Expiratory reserve volume
- c)Functional residual capacity
- d)Inspiratory reserve volume

9-The importance of vagal tone on the heart is:

- a)To increase the arterial blood pressure
- b)To increase the intestinal secretion
- c)To increase the oxygen consumption
- d)To decrease the cardiac activity

11-The following hormones elevate the arterial blood pressure Except:

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

2-Angiotensin II :

- a)Is formed by the action of an enzyme on angiotensin III
- b)Is released from juxtaglomerular apparatus of the kidney
- c)Acts by stimulation of the vasomotor center
- d)Is formed due to stimulation of rennin release in the circulation

4- Factors that shift oxygen dissociation curve to the right:

- a)Increase 2,3 DPG
- b)Increased temperature
- c)Acidosis
- d)All of the above

6-The ratio of cardiac work to the total energy expenditure is:

- a)The cardiac mechanical efficiency
- b)The cardiac index
- c)Constant during muscular exercise
- d)Not affected by the coronary blood flow

8-Peripheral chemoreceptors are stimulated mainly by:

- a)Low PO₂
- b)Low PCO₂
- c)Increase hydrogen ion concentration
- d)Alkalosis

10-In the arterial blood:

- a)The hematocrit value is higher than the venous blood
- b)Carbamino compounds are more than The venous blood
- c)PO₂ equals 100mmHg
- d)PCO₂ equals 46mmHg

12-The buffer systems in the blood are:

- a)Carbonic acid /bicarbonates
- b)HB buffer
- c)plasma proteins
- d)All of the above

13-Surfactant deficiency occur in the following conditions Except:

- a) Long term inhalation of 100% oxygen
- b) Hyaline membrane disease of premature infants
- c) Hypocorticism
- d) hyperthyroidism

15-Heparin has the following effects Except:

- a) Lipemia clearing effect
- b) Combines with antithrombin III and increase its action
- c) Can be given orally and by injection
- d) Acts both in vivo and vitro

17-The conversion of fibrinogen to fibrin is promoted by:

- a) Factor X
- b) Thrombin
- c) Prothrombin
- d) Platelets

19- The hemorrhagic tendency in liver diseases is due to deficiency of;

- a) Platelets
- b) Bilirubin
- c) Bile pigments
- d) Vitamin K

14-Hemophilia is due to:

- a) Deficiency of factor VIII
- b) Deficiency of platelets
- c) Prolongation of bleeding time
- d) Vitamin K deficiency

16-The heart rate is increased due to:

- a) Increase of the venous return
- b) Decrease arterial blood pressure
- c) O₂ lack
- d) All of the above

18- Pitting edema is resulting from all the following diseases Except:

- a) Renal diseases
- b) Congestive heart failure
- c) Liver diseases and hypoproteinemia
- d) Elephantiasis

20-All the following mechanisms occur in hemostasis Except:

- a) Increase of heparin secretion
- b) Vasoconstriction of blood vessels
- c) Clot formation
- d) Platelets aggregation

No	A	B	C	D	No	A	B	C	D
1					11				
2					12				
3					13				
4					14				
5					15				
6					16				
7					17				
8					18				
9					19				
10					20				

Answer of MCQ at the table

ملحوظة:

26/2/2017 الامتحان الشفهي

بقسم الفسيولوجي الثامنة صباحا

اجابة الاسئلة الاختيارية بالجدول و

يدرس بكتابة الاجابة

Tanta University
Faculty of Medicine
Human Anatomy & Embryology Dep.
13/2 /2017
Time Allowed: 3 Hours

Master of Science in Emergency medicine
and traumatology
Anatomy Examination
Number of Questions: 4
Total: 22.5 Marks



EMERGENCY MEDICINE & TRAUMATOLOGY

All questions to be answered

- 1- **A- Mention** the subarachnoid cisterns. (3.5 marks)
B- Enumerate the dural venous sinuses and mention their general features. (4 marks)
- 2- **Discuss** the procedure of the tracheostomy. (3 marks)
- 3- **A- Describe** the formation of the portal vein and **enumerate** the main sites of porto-systemic anastomosis. (3 marks)
B- Discuss the fractures of the pelvis. (3 marks)
- 4- **A- Identify** the four locations in the lower limb where the peripheral pulse can be felt. (3 marks)
B- Discuss the supracondylar fracture of the humerus. (3 marks)

END OF THE EXAM

Oral Examination:

On Tuesday 14 / 2/ 2017 at 9.5 o'clock in the Anatomy Department
(Second floor)

WITH MY BEST WISHES

Chairman of Department: Prof. Dr. Mona Zoair

M.Sc. Emergency Medicine Exam.

Pharmacology department
Faculty of Medicine
Tanta University

Date: 13-2-2017
Time allowed: 1 hour
Number of Questions: 4
Total : 90 marks



Answer all the following questions

1. **Give an account on: [21 marks]**

- a- Fibrinolytic drugs (types, mode of action)
- b- Pethidine (mode of action, uses).
- c- Cephalosporins (mode of action, adverse effects).

2. **Mention the lines of treatment of the following cases: [18 marks]**

- a- Acute aspirin toxicity
- b- Diabetic coma.
- c- Hypertensive emergencies.

3. **Give reason: [9 marks]**

- a- Sodium nitroprusside i.v infusion must not sopped suddenly
- b- In neurogenic shock morphine is given diluted slowly IV.
- c- Adrenaline is the drug of choice for treatment of anaphylactic shock.

4. **M.C.Q.: [42 marks]**

1- **Which of the following solutions is preferred for the initial treatment of most patients presenting with acute circulatory insufficiency caused by hypovolemia**

- a. Normal saline
- b. 5% dextrose
- c. 25% albumin
- d. 3% sodium chloride

2- **Sympathomimetic drug which preferred in the treatment of cardiac arrest:**

- a. Methoxamine.
- b. Tetrahydrozoline.
- c. Adrenaline.
- d. Xylometazoline.

3- **Which of the following drugs is related to anticoagulants and may be useful in disorders of cerebral circulation?**

- a. Aspirin
- b. Cinnarizine
- c. Nicergoline
- d. Heparin

4- **Idiosyncrasy means:**

5- A 47-year-old female comes to the emergency department with severe crushing chest pain of one hour's duration. Electrocardiogram and blood chemistries are consistent with a diagnosis of acute myocardial infarction. Streptokinase is chosen as part of the therapeutic regimen. What is its mechanism of action?

- a. It activates the conversion of fibrin to fibrin-split products
- b. It activates the conversion of plasminogen to plasmin
- c. It inhibits the conversion of prothrombin to thrombin
- d. It inhibits the conversion of fibrinogen to fibrin

6- Rapid termination of status epilepticus:

- a. I.V diazepam.
- b. I.V thiopental.
- c. both.
- d. neither.

7- Adverse effects of furosemide include all of the following EXCEPT:

- a. hypercalcaemia
- b. hyperlipidemia
- c. hypokalaemia
- d. ototoxicity

8- Drug with low therapeutic index indicates:

- a. Can be used IV
- b. Can be used oral
- c. Given in very tiny doses
- d. Potentially toxic substance

9- Hyperkalaemia is a contraindication to use which of the following drugs?

- a. Acetazolamide
- b. Chlorothiazide
- c. Ethacrynic acid
- d. Spironolactone

10-Low dose infusion of dopamine results in which of the following:

- a. Produce peripheral vasoconstriction.
- b. Decrease cardiac output.
- c. Decrease systolic blood pressure.
- d. Increase renal blood flow.

11-A 45-year-old male post-myocardial infarction for one week is being treated with IV heparin; he has recently an episode of hematemesis and fecal occult blood. The heparin is discontinued, and a drug is given to counteract the bleeding. What drug was given?

- a. Aminocaproic acid

12-The most important step in treatment of septic shock is giving

- a. Adrenaline
- b. Corticosteroids
- c. Broad spectrum antibiotics
- d. Dopamine

13-Redistribution is a feature of:

- a. High plasma protein binding
- b. Poor lipid soluble drugs
- c. High lipid soluble drugs
- d. None of the above

14-The role of corticosteroids in treatment of anaphylactic shock includes all of the following EXCEPT:

- a. Decrease antibody formation.
- b. Stabilize mast cell.
- c. Increase capillary permeability.
- d. Decrease antigen antibody reaction.

15-All of the following are used in atrial arrhythmias EXCEPT:

- a. Digoxin
- b. Verapamil
- c. Quinidine
- d. Lignocaine

16-Sympathomimetics drug which preferred for treatment of cardiogenic shock:

- a. Noradrenaline.
- b. Dobutamine
- c. Amphetamine.
- d. Methoxamine.

17-Which of the following is an IV Antiplatelet agent

- a. Aspirin
- b. Eptifibatide (Integrilin)
- c. Clopidogrel (Plavix)
- d. Ticlopidine (Ticlid)

18-The following drugs may be effective in relieve of acute attacks of bronchial asthma EXCEPT:

- a. Adrenaline
- b. Betamethazone
- c. Theophylline
- d. Disodium cromoglycate

19-Mannitol is used in treatment of:

- a. acute pulmonary edema
- b. hyperkalaemia
- c. acutely raised intracranial or intraocular pressure
- d. primary or secondary hyperaldosteronism

20-Nitroglycerine exerts beneficial effects in variant angina primarily by:

- a. Coronary vasodilation
- b. Decreased ventricular contractility
- c. Reduction of cardiac preload
- d. Reduction of cardiac afterload

21- All the following statements regarding adenosine are true EXCEPT:

- a. Dipyridamole potentiates its action
- b. Used to produce controlled hypotension
- c. Administered by slow I.V. injection
- d. Administered by rapid I.V. injection

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GOOD LUCK☺

امتحان الشفوى بالقسم السبت 2017 / 2/25 الساعة 9 صباحا



Tanta University
Faculty of Medicine
Forensic Medicine & Clinical Toxicology Department
MSC Emergency Medicine and traumatology 1st part

February (20-2-2017)

Time allowed: 1 hr

All questions are to be answered: (20 MARKS)

All questions are to be answered:

I-Case Scenarios:

1- A child came to the emergency room with a history of swallowing phenol.

- How to manage the case. (4 marks)

2-A firearm injured patient in the left upper abdomen came to the emergency room, he was shocked. Their relatives alleged that his neighbor hit him with shot gun at distance of nearly 2 meters.

-describe the wound in this case and its management. (3 marks)

II- Write a primary medico-legal report for a case of contused wound (3 marks)

III- **Recognize** the role of physician in case of head injury. (4 marks)

IV-Discuss :

a-Early signs of death (3 marks)

b- External signs of manual throttling. (3 marks)

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