

Date:18/2/2018  
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 hemorrhagic 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

**2-Aniotensin 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 chemoreceptor are stimulated mainly by:**

- a)Low  $PO_2$
- b)Low  $PCO_2$
- c)Increase hydrogen ion concentration
- d)Alkalosis

**10-In the arterial blood:**

- a)The hematocrite value is higher than the venous blood
- b)Carbamino compounds are more than The venous blood
- c) $PO_2$  equals 100mmHg
- d) $PCO_2$  equal 46mmHg

**Tanta university**  
**Faculty of medicine**  
**Department of Anatomy and Embryology**



**ANATOMY EXAM. FOR MASTER SCIENCE IN EMERGENCY  
MEDICINE & TRAUMATOLOGY**

Date:18/2/2018

Total marks: 22.5 Marks

Time allowed (three hours)

**EMERGENCY MEDICINE & TRAUMATOLOGY**

**All questions to be answered**

**Illustrate your answer with diagram whenever possible:**

1. **Discuss** the radial nerve injuries in the spiral groove of the humerus  
(3marks).
2. **Identify** the peripheral pulses felt at four locations in the lower limb?  
(3marks).
3. **What** are the complications of the anterior cranial fossa fractures?  
(3.5 marks).
4. **Enumerate** the openings in the Diaphragm?  
(3 marks).
5. **Describe** the causes and sites of pain of Appendicitis? (3 marks)
6. **Write** short note on fractures of the Sacrum and Coccyx? (3 marks)
7. **Enumerate** the dural venous sinuses and mention their general Features?  
(4 marks).

**END OF EXAM.**

**Oral Examination: Sunday 25<sup>th</sup> Feb 2018 at 10 am.**  
**in the Anatomy Department (Second floor)**

**Best Wishes**  
**Chairman of Anatomy Department**  
**Prof.dr. Magdy Said**

**All questions are to be answered**

1 - There are major mechanisms that mediate bacterial resistance to Antimicrobial Drugs:

Discuss & explain this problem . put a plan to overcome , (6 marks).

2- A case admitted to the ER with high fever and severe headache. The symptoms rapidly became worse, photophobia , seizures (fits), confusion, drowsiness, and loss of consciousness.

- a - What is your differential diagnosis. b – the most common causes of each .  
c- Tests and investigations you order for full diagnosis . d – Treatments.  
, (6 marks).

3- A case of bronchial asthma was admitted to the ER ;  
explain immunologic bases , how to manage . , (6 marks).

4- Mention important infectious causes of pyrexia ; & preliminary steps of management ,  
Microorganisms . , (6 marks).

5 - - Dog bites represent an important public health issue; if you receive a case , how can you  
manage it , (6 marks).

Oral exam 5/3 2018

Good luck

Examination for MSc in EMERGENCY MEDICINE  
Course Title: Pediatrics  
Date: February 25, 2018  
Time allowed: one Hour  
Total Assessment Marks: 100 (Two Pages)



Tanta University  
Faculty of Medicine  
Department of Pediatrics

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*All questions should be answered*  
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## Long essay

Discuss management of thermal injury and smoke inhalation. (35)

## Short essay

Discuss briefly rapid sequence intubation (Equipment & drugs). (25)

## Problem solving

(25)

**A 7 year old boy is brought to the ED after suffering an asthma attack at his GP. He has used his salbutamol inhaler repeatedly but has not responded. He has received oral steroids from the GP. During your initial assessment you note the child is unable to complete sentences in one breath, his heart rate is 120 beats per minute and his respiratory rate is 32. His oxygen saturations are recorded as 94% on air. On auscultation you hear bilateral widespread wheeze.**

- a. How would you class the severity of this child's exacerbation of asthma?
- b. What two drugs (including dose and route) should be given initially to this patient?
- c. Despite appropriate treatment, the patient continues to deteriorate and you call for intensive care support. What two intravenous drugs can you give prior to their arrival?

# MCQs

Choose the correct answer:

(15)

**1-Which one of the following statements concerning intraosseous infusion is true?**

- a. Only crystalloid solution may be safely infused through the needle.
- b. Aspiration of bone marrow confirms appropriate position of the needle.
- c. Intraosseous infusion is the preferred route for volume resuscitation in small children.
- d. Intraosseous infusion may be utilized indefinitely.

**2-bronchial intubation of right or left mainstem bronchus can easily occur during infant endotracheal intubation because:**

- a. The trachea is relatively short.
- b. The distance from the lips to the larynx is relatively short.
- c. The use of tube without cuffs allows the tube to slip distally.
- d. The mainstem bronchi are less angulated in their relation to the trachea.

**3- The first priority in managing a witnessed ventricular fibrillation cardiac arrest is:**

- a. Defibrillation.
- b. endotracheal intubation.
- c. establishment of intravenous access.
- d. external cardiac massage.

**4- A patient with septic shock who is intubated and mechanically ventilated develops worsening oxygenation. CXR shows development of new bilateral infiltrates suggestive of pulmonary edema. The most appropriate next step is:**

- a. Administration of furosemide.
- b. Increase PEEP.
- c. Increase respiratory rate.
- d. Start methylprednisolone.

**5- A previously healthy 4 year-old girl presents with hypoventilation and hypoxemia secondary to pneumonia. You decide to intubate her with a:**

- a. 4 mm internal diameter (ID) cuffed endotracheal tube.
- b. 4 mm ID uncuffed endotracheal tube.
- c. 5 mm ID uncuffed endotracheal tube.
- d. 5 mm ID cuffed endotracheal tube.

=====Good Luck=====