

2021 دور فبرایر Pharmacology exam for MSc in chest

Tanta University

Pharmacology Written Examination

Faculty of Medicine

Number of Questions: 30 MCQs

Pharmacology Department

Time Allowed: 1 Hour

Date: 28/3/2021

Total: 30 Marks



MCQs (30 marks):

1-A patient with asthma was prescribed a β_2 agonist for acute relief of bronchospasm. but did not respond to treatment. Which drug is the most likely next option for this patient ?

- a-Benztropine.
- b-Ipratropium.
- c>Oxybutynin.
- d-Physostigmine.

2-An asthma patient was given a nonselective β agonist to relieve bronchoconstriction. Which adverse effect would you expect in this patient?

- a-Bradycardia.
- b-Tachycardia
- c-Hypotension.
- d-Worsening bronchoconstriction.

3-Bioavailability of an agent is maximal when the drug is :

- a-Highly lipid soluble.
- b-Larger than 100 Daltons in molecular weight.
- c-Highly bound to plasma protein.
- d-Highly ionized.

4-A bolus of drug K is given intravenously. The drug is noted to follow first order kinetics. Which of the following describes the elimination of drug K?

- a-The rate of elimination of drug K is constant.
- b-The rate of elimination of drug K is proportional to the patient's renal function.
- c-The rate of elimination of drug K is proportional to its concentration in patient's plasma.
- d-The rate of elimination of drug K is dependent on a nonlinear relationship to the plasma protein concentration.

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5-Which of the following is the most accurate statement?

- a- α –adrenoceptor sympathomimetic agonists are used to reduce mucous membrane congestion .
- b- α - adrenoceptor agonists are used to treat bronchospasm.
- c- β -adrenoceptor agonists are used to reduce surgical bleeding.
- d- β 2-adrenoceptor agonists agents ate used to prolong local anesthesia..

6-Which of the following is the least likely clinical use of β -adrenoceptor antagonists?

- a-Benign prostatic hypertrophy.
- b-Cardiac arrhythmias.
- c-Hypertension .
- d-Ischemic heart disease.

7-The antitussive agent dextromethorphan:

- a-Activates mu,delta,and kappa receptors.
- b-Has analgesic activity in addition to its antitussive activity.
- c-Has no dependence liability.
- d-Is more constipating then codeine.

8-A child with severe asthma is treated with high – dose inhaled corticosteroids . Which adverse effect is of particular concern?

- a-Hypoglycemia.
- b-Hirsutism.
- c-Growth suppression .
- d-Cushing syndrome.

9-A female patient is diagnosed with TB. A careful medical history should be taken because one of the drugs commonly used in TB therapy may lead to serious decrease in plasma level of concomitantly used drugs . Which drug is it ?

- a-Ethambutol.
- b-Pyrazinamide.
- c-Isoniazide.
- d-Rifampicin.

10-Prolonged treatment with INH leads to deficiency of?

- a-Pyridoxine.
- b-Thiamine.
- c-Pantothenic acid.
- d-Niacin.

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11-Occurrence of the following adverse reaction absolutely contraindicates further use of rifampicin in the treatment of TB.

- a-Respiratory syndrome.
- b-Cutaneous syndrome.
- c-Flu like syndrome.
- d-Abdominal pain.

12-A 30 year old pregnant women develops tuberculosis .Which of the following antitubercular drugs should not be used ?

- a-INH.
- b-Rifampicin.
- c-Streptomycin.
- d-Ethambutol.

13-Drug of choice for acute (pneumococcal) lobar pneumonia is :

- a-Amoxicillin clavulanic acid combination.
- b-Ciprofloxacin.
- c-Co-trimoxazole.
- d-Crystalline penicillin(Pen. G).

14-Drug of choice in pertussis is:

- a-Penicillin .
- b-Doxycycline.
- c-Erythromycin.
- d-Ciprofloxacin.

15-With which of the following receptors theophylline has an antagonistic interaction ?

- a-Histamine receptors.
- b-Bradykinin.
- c-Adenosine receptors .
- d-Imidazoline receptors .

16-Leukotriene receptor antagonist used for treatment of bronchial asthma is:

- a-Zafirlukast.
- b-Zileuton.
- c-Cromolyn sodium.
- d-Aminophylline.

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17-The drug not used in acute asthma is :

- a-Salbutamol.
- b-Ipratropium.
- c-Montelukast.
- d-Hydrocortisone.

18-A 55-year-old female who is taking propranolol for the management of a cardiovascular disease experiences an acute asthmatic attack. Which of the following drugs would you prescribe to attenuate this asthmatic attack?

- a-Cromolyn sodium .
- b-Salbutamol.
- c-Beclomethasone.
- d-Ipratropium bromide .

19-Which of the following is not a bronchodilator?

- a-Beta 2 agonists.
- b-Methylxanthines.
- c-Steroids.
- d-Anticholinergic.

20-Drug inhibiting bacterial protein synthesis are all EXCEPT:

- a-Aminoglycosides.
- b-Chloramphenicol.
- c-Clindamycin.
- d-Sulfonamides.

21-A 24-year –old pregnant women was diagnosed with community – acquired pneumonia and will be managed in the outpatient setting. Which antibiotic is a safe option for this patient to treat her pneumonia ?

- a-Azithromycin.
- b-Doxycycline.
- c-Linezolid.
- d-Gentamycin.

22-Which of the following statements accurately describes the difference in spectrum of activity between erythromycin and azithromycin ?

- a-Azithromycin has better activity against respiratory pathogens such as Haemophilus influenzae and Moraxella catarrhalis but less potent activity against staphylococci and streptococci.

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b-Erythromycin has the same activity as azithromycin against gram – positives and gram –negatives.

c-Azithromycin has better activity against staphylococci and streptococci compared to erythromycin.

d-Erythromycin has better activity against gram- negative such as H. influenza

23- A 12-year –old girl with asthma presents to the emergency room with complaints of cough ,dyspnea and wheezing after visiting riding stable .Which is the most appropriate drug to rapidly reverse her bronchoconstriction?

A-Inhaled fluticasone.

b-Inhaled beclomethasone .

c-Inhaled albuterol.

d-Intravenous propranolol.

24-A 68-year-old man has COPD with moderate airway obstruction . Despite using salmeterol twice daily ,he reports continued symptoms of shortness of breath with mild exertion. Which agent is an appropriate addition to his current therapy?

a-Systemic corticosteroids .

b-Albuterol.

c-Ipratropium.

d-Roflumilast.

25-Bromohexine acts by:

a-Inhibiting cough center.

b-Irritating gastric mucosa and reflexly increasing bronchial secretion.

c-Depolymerizing mucopolysaccharides present.

d- Desensitizing stretch receptors in the lung.

26-Antitussive act by :

a-liquifying bronchial secretions .

b-Raising the threshold of cough centre.

c-Reducing cough inducing impulses from lungs.

d-Both b and c.

27-The antiasthma drug which cannot be administered by inhalation:

a-Theophylline.

b-Ipratropium bromide.

c-Budesonide.

d-Terbutaline.

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28-A 10-year-old child suffers from exercise induced asthma: Which is the most suitable first line drug for regular prophylactic therapy?

- a-Oral salbutamol.
- b-Oral theophylline.
- c-Inhaled sodium cromoglycate.
- d-Inhaled beclomethasone dipropionate.

29- Budesonide is a:

- a-Nonsteroidal anti-inflammatory drug .
- b-High ceiling diuretic.
- c-Inhaled corticosteroid for asthma.
- d-Antihistaminic..

30-INH and pyridoxine are given to gather in antituberculous chemotherapy :

- a-To prevent peripheral neuritis.
- b-To prevent emergence of INH resistance.
- c-As a nutrient supplement.
- d-As a synergistic combination.

ORAL Examination at 31/3/2021



Department of physiology
Time allowed: Three hours
Total marks: 30

Physiology
MSC Chest

Tanta University
Faculty of Medicine
Code: CHEST 8002
Date: 25 / 3 /2021

All the questions must be answered:

- 1- Discuss : Chemical regulation of respiration. (10 marks)
2- Mention : Types and significance of dead space. (5 marks)

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

1- Edema is increased by:

- a. Decrease blood volume.
- b. Increase osmotic pressure of plasma protein.
- c. Increase capillary hydrostatic pressure.
- d. Decrease capillary hydrostatic pressure .

2- Peripheral chemoreceptors are mainly stimulated by:

- a. Alkalosis.
- b. Increase arterial pO_2 .
- c. Decrease arterial pO_2 .
- d. Increase arterial blood pressure.

3- Obstructive lung disease could induce:

- a. Metabolic acidosis.
- b. Metabolic alkalosis.
- c. Respiratory acidosis.
- d. Respiratory alkalosis.

4- Intrinsic mechanism of blood coagulation start by activation of factor :

- a. VIII.
- b. X.
- c. XII.
- d. III.

5- Aldosterone could decrease blood level of:

- a. Sodium.
- b. Potassium.
- c. Calcium.
- d. Glucose.

6- Stimulation of beta 1 adrenergic receptors could induce:

- a. Decrease heart rate.
- b. Increase heart rate.
- c. Miosis.
- d. Bronchoconstriction.

7- Irreversible shock induce:

- a. Increase sympathetic activity.
- b. Increase capillary permeability.
- c. Increase cardiac output.
- d. Decrease capillary permeability.

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- 8- Which of the following is characteristic for Cushing syndrome :
- Hypoglycemia .
 - Hypotension.
 - Abnormal fat deposition.
 - Bradycardia.
- 9- Which of the following is function of Vitamin K :
- Is anticoagulant.
 - Induce vascular spasm.
 - Help formation of prothrombin.
 - Inhibit formation of prothrombin.
- 10- Which of the following is calcium lowering hormone :
- Calcitonin.
 - Thyroxine.
 - Insulin.
 - Parathormone.
- 11- Vasoconstriction of arterioles induce:
- Increase peripheral resistance.
 - Decrease peripheral resistance.
 - Increase heart rate.
 - Decrease heart rate.
- 12- Hemophilia is caused by deficiency of coagulation factor.
- Factor VIII
 - Factor V
 - Factor VII
 - Factor III
- 13- Which of the following is function of insulin :
- Rise blood K^+ level.
 - Exert lipolysis.
 - Had protein catabolic effect.
 - Lower blood K^+ level.
- 14- Which of the following could induce respiratory alkalosis:
- Excess renal HCO_3 reabsorption.
 - Respiratory depression.
 - Obstructive lung disease.
 - Hyperventilation.
- 15- Metabolic acidosis differ from respiratory acidosis in that there is:
- Increase PCO_2 and HCO_3 .
 - Increase HCO_3 .
 - Increase PCO_2 .
 - Normal or low PCO_2 .

امتحان الشفهي يوم الأربعاء 31/3/2021 في قسم الفسيولوجي التاسعة صباحا

Tanta University
Faculty of Medicine
Microbiology & Immunology Department
Master of Chest Diseases
(Microbiology)

Date: 28 /3/2021 Time allowed: one Hour

-Answer the following questions:

1- Give an account on:

(8 Marks- 2 mark each)

- Bacterial cell wall
- Mechanism of antimicrobial drug resistance
- Atopy
- Tamiflu

2- Mention the causative organism, and methods of diagnosis of each of the following:

(6 Marks-3marks each)

- Fungus ball
- Swine flu

3-Give an account on the causative organisms and Diagnosis of each of the following:

(6 Marks-3 marks each)

- Friedlander's pneumonia.
- Pneumonic plague.

4-Give an account on pathogenesis, treatment and prophylaxis of a case of pulmonary tuberculosis.

(10 Mark)

يعقد الامتحان الشفوي يوم الاثنين الموافق 5/4/2021 بقسم الميكروبيولوجي الساعة العاشرة صباحاً



Pathology examination for Master degree in: Chest
Code No.: chest 8003
Date: 28/3/2021
Term: February 2021
Time Allowed: 1 hour
Total Assessment Marks: 30



Tanta University
Faculty of Medicine
Department of: pathology

<i>Questions Number</i>	<i>Marks</i>
Q1- Comment about the granulomatous inflammation.	10
Q2- Short notes about stromal lung tumours.	10
Q3- What about pleural mesothelioma.	10

NB : Time of oral exam.: Monday : 5/4/2021---- 11 A.M.

Tanta University
Faculty of Medicine
Public Health &
Community Medicine
Dept.
30/3/2021
The exam in 2 pages

1st part Master Degree; Chest Diseases &
Tuberculosis
Public Health & Community Medicine Exam.
Number of Questions: 4 in 2 pages
Time Allowed: 3 Hours
Total: 30 Marks



Answer all the following questions.

Question 1: Define each of the following:

5 marks

- a- Risk factors
- b- Positive predictive value as an indicator for screening test validity
- c- Case fatality rate.
- d- Silicosis.
- e- Bacteriologically confirmed tuberculosis case.

Question 2: Enumerate:

5 marks

- a- Sources of data used in research studies.
- b- Precipitating factors for bronchial asthma.
- c- Objectives of occupational health program.
- d- Values of epidemic curve
- e- Requirements for a good health education message.

Question 3: Discuss each of the following:

10 marks

- a- Cohort study as one of the research study designs.
- b- Health appraisal services in occupational health program.
- c- Time as a component of epidemiological model describing distribution of diseases.
- d- According to the international standards for Tuberculosis care No. (19) "Children < 5 years of age and persons with HIV/AIDS who are in close contact with an infectious tuberculosis disease, and who do not have active tuberculosis should be treated for presumed latent tuberculosis infection with Isoniazid".
- e- Predisposing factors for nosocomial infection.

Question 4: Choose the correct answer:

10 marks

1. What is the useful index to measure the lethality of an acute infectious disease?
 - a. attack rate
 - b. incidence
 - c. case fatality rate
 - d. none of above
2. What is the best method to prevent pulmonary tuberculosis?
 - a. case isolation
 - b. detection and treatment of cases
 - c. BCG vaccination
 - d. chemoprophylaxis

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3. In an outbreak of cholera in a village of (2000) population, (20) cases have occurred and (5) died. What is the Case fatality rate?
- 1%
 - 0.25%
 - 5%
 - 25%
4. Incidence is defined as
- no. of cases existing in a given population at a given moment
 - no. of cases existing in a given period
 - no. of cases newly occurring during a specific period
 - no. of old cases present during a specific period in a given population
5. Carrier state is seen in all the following diseases except
- diphtheria
 - tuberculosis
 - typhoid
 - polio
6. All the followings are predictors for likelihood of TB transmission, except:
- anatomical site of infection
 - sputum bacteriology
 - latent TB infection
 - radiographic finding
7. What is the best method to prevent pulmonary tuberculosis?
- case isolation
 - treatment of cases
 - BCG vaccination
 - chemoprophylaxis
8. Prevalence of tuberculous infection is determined by
- sputum examination
 - Mantoux test
 - clinical examination
 - MMR
9. From the time of testing, after how long should Tuberculin skin test be read?
- 48 hours
 - 72 hours
 - 96 hours
 - 24 hours
10. All the following form a part of occupational health history except
- history of previous occupation
 - exposure to dust
 - childhood immunization
 - safety measures employed in industry

End of questions

Best wishes

Tanta University

Faculty of Medicine

Department of Medical Biochemistry

Chest Master Final Exam

25/3/2021

1) Discuss the following :

Identify the impact of climate and oxidative stress in development of certain chest related disease and Corona virus .

(20 marks)

II) Give short account on :

(10 marks)

- a. Renal function tests .
- b. IL-9 and its relation to asthma

GOOD LUCK

ملحوظة: امتحان الشفوى بالقسم ان شاء الله بعد انتهاء الامتحان
التحريري مباشرة بنفس اليوم.