

# RESPIRATORY SYSTEM

**FINAL EXAM**  
**WAREED BATCH**

إعداد :



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Pharma

1) What is the form of lung disease that mostly complicates aspirin use?

- a. Acute bronchospasm.
- b. Acute pneumonitis.
- c. Pulmonary fibrosis.
- d. Chronic pneumonitis.
- e. Alveolitis.

2) Regarding the posterior intercostal artery, CHOOSE the most appropriate answer:

- a. The 3rd-11th posterior intercostal arteries branch from the thoracic aorta
- b. All posterior intercostal arteries branch from the thoracic aorta
- c. First posterior intercostal artery branches directly from subclavian
- d. They are 12 pairs
- e. The 1st, 2nd and 3rd posterior intercostal arteries branch from costocervical trunk

Anatomy

3) After diffusing into capillaries P02 and PC02. which of the following is NOT true?

- a. 1.5% of oxygen is dissolved
- b. 98% of oxygen is carried by hemoglobin
- c. 70% of CO2 is readily dissolved
- d. 23% of CO2 is carboxyhemoglobin
- e. 70% of CO2 is H2CO3

physio

4) By comparing between pulmonary and systemic circulation, which of the following is NOT TRUE?

- a. Pulmonary vascular resistance is 1/10 of Systemic vascular resistance
- b. The right ventricle receives mixed venous blood and pumps it through the pulmonic valve, which marks the beginning of the pulmonary circulation
- c. Pulmonary capillary blood flows in thin sheets, as opposed to the distinctly tubular flow in systemic capillaries
- d. The thin walls of pulmonary vessels and vast area of the capillary bed make the pulmonary vasculature highly distensible compared with the systemic vasculature
- e. The diffusion distance between air and blood in pulmonary circulation is ten times of the diffusion distance that exists between systemic capillaries and tissue cells

5) The main blood supply of the Litte's area from :

- a. The first part of the maxillary artery
- b. The second part of the maxillary artery
- c. The third part of the maxillary artery
- d. The facial artery
- e. The ophthalmic artery

Anatomy

6) Select the appropriate statement regarding the 8th rib:

Anatomy

- a. It is one of the true ribs
- b. It is typical rib
- c. Attached anteriorly to the sternum by its costal cartilage
- d. It is one of the floating ribs
- e. Its head carries one articular facet

7) Which of the followings is INCORRECT regarding *P. westermani*?

Micro

- a. Habituating lungs in cyst like pockets
- b. The parasite infestation only affects lungs
- c. Chronic cases resemble pulmonary tuberculosis
- d. Pneumonia, bronchitis, and lung abscess in complicated cases
- e. Eosinophilia

8) All the following are true about *Pseudomonas aeruginosa* except?

Micro

- a. This organism is widely distributed in nature and is commonly present in moist environments in hospitals
- b. It is pathogenic only when introduced into areas devoid of normal defenses
- c. *P. aeruginosa* can infect only the respiratory tract system
- d. *P. aeruginosa* is invasive and toxigenic
- e. *P. aeruginosa* is resistant to many antibiotics

9) Which of the following cytokines produced by T-helper cell 2 in asthmatic attack activates eosinophils?

- a. IL-2
- b. IL-6
- c. IL-4
- d. IL-13
- e. IL-5

Patho

10) Which of the followings is INCORRECT regarding diphtheria?

Micro

- a. 1000 - 2000 units of ADS are administered in sever extensive cases
- b. Elimination of the organism should be documented by negative results of at least 2 successive cultures
- c. Without antibiotics, organisms usually persist 2 weeks or less and rarely more than 4 weeks
- d. Chronic carriers may shed organisms for 6 months or more
- e. Effective antibiotic therapy promptly terminates shedding

**11) Volumes and flows in the lung?**

- a. The ventilation rate is approximately 7500ml/min
- b. The ventilation rate is approximately 5250ml/min
- c. The volume reaching the blood gas per a minute on the gas side and the blood side is different
- d. The volume of alveolar gas and the volume of blood capillary at any instant in time is the same
- e. The fact is that the ratio of ventilation to pulmonary blood flow is more than one

**12) Maxillary air sinus opens into?**

**Anatomy**

- a. Superior meatus
- b. Middle meatus
- c. Sphenoethmoidal recess
- d. Bulla ethmoidalis
- e. Inferior meatus

**13) Which of the following statements is true?**

- a. Lowering the pH shifts the oxygen dissociation curve of hemoglobin to the right
- b. The acidic environment allows hemoglobin to bind O<sub>2</sub> more strongly
- c. The affinity of hemoglobin for O<sub>2</sub> is improved by high concentrations of CO<sub>2</sub>.
- d. In the lungs, the presence of higher concentrations of H<sup>+</sup> and CO<sub>2</sub> allows hemoglobin to become more oxygenated.
- e. In the lungs, the presence of higher concentrations of O<sub>2</sub> promotes the binding of CO<sub>2</sub> and H<sup>+</sup>.

**14) One of the following is unstable epoxide?**

**Pharma**

- a. leukotriene B<sub>4</sub>
- b. leukotriene C<sub>4</sub>
- c. leukotriene A<sub>4</sub>
- d. leukotriene D<sub>4</sub>
- e. leukotriene E<sub>4</sub>

**15) All of the following statements about the respiratory system are correct EXCEPT?**

- a. Clara cells are found only in the bronchiolar epithelium
- b. Most of the inside surface of alveoli is lined with type I pneumocytes
- c. The surfactant lining of the alveoli is produced by type II pneumocytes
- d. The larynx contains hyaline cartilage, smooth muscle and stratified squamous epithelium
- e. Mucociliary clearance involves goblet cells, ciliated epithelial cells and submucosal glands

**Histo**

**16) Which of the followings is mismatched regarding fungal infection?**

**Micro**

- a. Aspergillosis: Air borne
- b. Fungal ball: A. fumigates
- c. 95% of patients: Asymptomatic histoplasmosis
- d. Aspergillosis: Hypersensitivity reaction
- e. A. niger: Causes sinus and cutaneous infections

**17) According to the development of the lungs, which of the following are correct?**

- a. Prenatal alveoli expanded with air
- b. Type-I alveolar cells secrete the surfactant
- c. The amount of the surfactant decreases after birth
- d. Mature alveoli present before birth
- e. Surfactant cells line type II blood air barrier

Embryo

**18) The most important clinical implication of Dalton's law in alveolar ventilation?**

- a. Blood Gas Exchange
- b. Oxygen Mole fraction
- c. Hemoglobin dissociation curve
- d. Oxygen Partial Pressure
- e. Dynamic movement of oxygen and carbon dioxide into and out of blood stream

**19) Antioxidant enzymes. choose the wrong statement of the following?**

- a. Superoxide dismutase utilizes negatively charged metal ions to neutralize the positively charged superoxide radical
- b. Superoxide dismutase is called the primary defence against oxidative stress
- c. Catalase is found in peroxisomes and cytosol
- d. Glutathione is a tripeptide composed of glutamate, cysteine, and glycine.
- e. GSSG is reduced to glutathione by glutathione reductase

**20) Regarding antituberculous drugs. all the following are side effects of rifampicin EXCEPT?**

- a. Nausea and vomiting.
- b. Green staining of urine.
- c. Hepatotoxic.
- d. Flu-Like syndrome.
- e. Flushing and pruritis.

**21) Which of the following is NOT CONSISTENT with respiratory system under stress in high altitudes?**

- a. Increases production of 2, 3-Diphosphoglycerate
- b. Right shift of oxyhemoglobin dissociation curve
- c. At very high altitude left shift of oxyhemoglobin dissociation curve could happen due to increase pH
- d. Respiratory alkalosis
- e. Increase PAO<sub>2</sub> due to hyperventilation

# Medicine

## 22) With regard to pulmonary function?

مش اكيد

- a. Restrictive lung disease: FEV1 decrease less than FVC
- b. In reversible airway obstruction: Post- bronchodilator FEV1 % change decreases less than 12%
- c. In normal lung. FEV1 / FVC less than 70%
- d. Obstructive lung disease: FEV1/ FVC more than 70%
- e. Functional residual capacity (FRC) can be measured by spirometry.

## 23) What effect does the binding of CO2 and H+ to hemoglobin (Hb) in the peripheral tissues have on the body. choose the wrong statement?

Physio

- a. The binding of CO2 stabilize the tense form of Hb
- b. Binding of H+ to Hb serves as a buffer to regulate the pH of peripheral tissues
- c. It facilitates the release of O2 in the peripheral tissues
- d. The H+ released bind amino acid histidine number 143 in the two beta chains of adult Hb and serine in gamma chain in fetal
- e. The binding of H+ stabilize the tense form of Hb

## 24) Which of these items is true regarding external anatomy of the lung?

- a. The upper tapered end of the lung is its base
- b. The root of the lung is located at its base
- c. Visceral pleura covers all lung surfaces
- d. Lobes are comparable to bronchopulmonary segments
- e. Pulmonary ligament contains pulmonary artery

Anatomy

## 25) Regarding Nonspecific interstitial pneumonia, one is not true?

- a. The etiology is unknown.
- b. Patients presented with chronic dyspnea and cough.
- c. It shares the same temporal heterogeneity seen in UIP.
- d. The prognosis for this entity is better than for UIP.
- e. The histologic pattern shows either interstitial inflammation or interstitial fibrosis.

Pharma

## 26) All following drugs are used in treatment of community acquired pneumonia EXCEPT?

- a. Benzylpenicillin
- b. Azithromycin
- c. Ciprofloxacin
- d. Cefotaxime
- e. Tetracycline

**27) To assess TB prevalence in a community the most appropriate test is?** **Micro**

- a. Mass radiographic examination
- b. Direct sputum examination
- c. sputum culture examination
- d. Tuberculin Skin Test
- e. Clinical examination

**28) Each of the following statements concerning rhinoviruses is correct EXCEPT?** **Micro**

- a. Rhinoviruses are the most common cause of the common cold.
- b. Rhinoviruses grow better at better at 37°C than at 33°C.
- c. Rhinoviruses are members of the picornaviruses family.
- d. Are naked neucleocapsid Viruses with single-stranded, positive-polarity RNA.
- e. The cell surface receptor for rhinoviruses is ICAM-I.

**29) Zileuton?** *Pharma*

- a. Inhibits leukotrienes (LTB<sub>4</sub>, LTC<sub>4</sub>, LTD<sub>4</sub>, and LTE<sub>4</sub>) formation
- b. indicated for the prophylaxis and chronic treatment of asthma
- c. Is contraindicated in patients with active liver disease
- d. Is an active oral inhibitor
- e. Fits precisely to active site of leukotriene receptor

**30) Which of the followings is INCORREC?**

- a. 5% of histoplasmosis cases have acute pneumonia with flue-like symptoms
- b. PCR is a direct test to diagnose fungal infection
- c. Erythema nodosum is a clinical manifestation of histoplasmosis
- d. In immunocompromised patients, the histoplasmosis infection disseminates to different organs
- e. Histoplasmosis is caused by the inhalation of spores

**31) M.tuberculosis, one is FALSE?** **Micro**

- a. It has a lipid rich cell wall
- b. In about 90% of primary infections, the organism will remain latent
- c. PPD (Mantoux) test injected intradermally and is used in diagnosis of active infection
- d. Acid fast staining on sputum sample is not helpful for diagnosis or patient isolation
- e. Has a vaccine called BCG and is given within the first week after birth

**Physio**

**32) Regarding Blood Gas Barrier ultrastructural changes?**

- a. Polarized
- b. The alveolar side is thinner than capillary side
- c. Stress Failure
- d. One third of micron
- e. Type Four of collagen

**33) Regarding the implications of Starling law in edema, which of the following is NOT true?**

- a. Any factor that causes the pulmonary interstitial fluid pressure to rise from the negative range into the positive range
- b. Left-sided heart failure or mitral valve disease
- c. Damage to the pulmonary blood capillary membranes
- d. The pulmonary capillary pressure must rise from the normal level of 7 mm Hg to more than 28 mm Hg
- e. In chronic left-sided heart failure, in which the pulmonary capillary pressure does rise to 40 mmHg, death frequently ensues in less than 30 minutes

**34) Regarding fungal granuloma, one of the following is true?** Micro

- a. It is mainly caused by candida.
- b. It is more commonly seen in immunocompromised patients.
- c. Fungal elements can't invade blood vessels.
- d. The margin of the granuloma is soft, regular and green in color.
- e. Fungal balls are orange stained hyphal elements that can colonize cavitory lesions in patients with TB.

**35) How are bronchioles histologically different from bronchi?**

- a. Bronchi lining epithelium contains Clara cells
- b. Bronchiole walls have smooth muscle
- c. Bronchi have mucosa associated lymphoid tissue
- d. Bronchiole walls have hyaline cartilage
- e. Bronchi are different from bronchioles based on size alone

Histo

**36) Regarding influenza virus and the disease influenza, which one of the following statements is MOST ACCURATE?**

- a. The killed vaccine induces lifelong immunity
- b. The classification of influenza viruses into A, B, and C viruses is based on antigenic differences in their hemagglutinin
- c. The genome of influenza A virus has eight segments, but the genome of influenza B virus is in one piece
- cl. Antigenic shift involves major changes in antigenicity that result from reassortment of the segments of its RNA genome
- e. Chronic carriers (i.e., patients from whom influenza virus is isolated at least 6 months after the acute disease) are an important source of human infection



**37) Which of the following does not belong to the symptomatic bronchial asthma?**

- a. Chest pain
- b. Dyspnoea
- c. Wheeze
- d. Cough
- e. Expectoration

**38) A 56 year old man presents to the emergency department with weight loss and a thick, productive cough. He has a past medical history of liver transplant 2 years ago. A sputum culture shows Gram positive filamentous bacteria. Which stain is helpful for distinguishing the 2 major genera of filamentous bacteria?**

- a. GMS.
- b. Gram stain.
- c. Modified acid fast stain.
- d. Ziehl-Neelsen stain.
- e. PAS stain.

Patho

**39) All are CORRECT regarding E. granulosus EXCEPT?**

Micro

- a. The hydatid cyst in dogs is the source of eggs
- b. The size of the cyst is variable from 1 mm - 20 cm
- c. The daughter cysts are filled with protoscoleces
- d. D.H are canines
- e. I.H: Sheep, cattle, pigs and occasionally man

**40) Each year there are discussions about new formulations of the vaccine for influenza A virus. Why?**

Micro

- a. Because mutations occur mainly in the envelope proteins, hemagglutinin, and neuraminidase
- b. The half-life of the vaccine is a few months and degrades quickly in host cells
- c. Because of the changes that occur in neuraminidase protein together with nucleocapsid antigen
- d. Mutations predominantly take place in the matrix protein that interacts with the host cell receptor
- e. Because the vaccine is comprised of several drugs that are active against the virus for one season

**41) Regarding Streptococcus pneumoniae and Streptococcus viridans all are true EXCEPT?**

Micro

- a. They are gram-positive
- b. Respiratory tract of carriers is the most important source of infection with Streptococcus pneumoniae
- c. Streptococcus pneumoniae causes meningitis
- d. They can be differentiated by the bile solubility test and their susceptibility to optochin
- e. Quellung reaction is specific for viridans streptococci differentiating it from S. pneumoniae

Pharma All are true

**42) All following drugs are used in status asthmaticus EXCEPT?**

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

Pharma

**43) All following combinations about treatment of cough are TRUE EXCEPT?**

- a. Carbocysteine- Mucolytics
- b. Guaifensin- Expectorants
- c. Morphine- moderate efficacy opioid
- d. Codeine- low efficacy opioid
- e. Pholcodeine- OTC cough preparations

**44) Regarding Asthma one statement is correct?**

- a. Increased cleanliness leading decreases in asthma
- b. Increased family size leading to increases asthma
- c. Exposure to bacterial endotoxin in early childhood increases asthma,
- d. Use of antibiotics in early life has been linked to the decrease of asthma.
- e. It is more common in the young than the old.

Physio

**45) The peripheral chemoreceptors?**

- a. Are located in the pulmonary artery and aortic arch
- b. Are responsible for 80% of the ventilatory response to increased  $P_{CO_2}$
- c. Respond to changes in arterial pH
- d. Contain type II cells which detect hypoxia
- e. Have low blood flow

**46) The definitive nasal cavity is separated from the oral cavity by?**

- a. Primary palate
- b. Nasal septum
- c. Secondary palate
- d. Nasal placodes
- e. Hard palate

Anatomy

**47) Regarding the cough reflex which is INCORRECT?**

- a. It is complex, involving the central and peripheral nervous systems as well as the smooth muscle of the bronchial tree.
- b. Chemical or mechanical irritation of the epithelium within bronchial mucosa stimulates cough receptors .
- c. Cough receptors are also present in pericardium,oesophagus and stomach.
- d. Diaphragmatic weakness may cause impaired cough reflex.
- e. Afferent conduction from cough receptors occurs via the glossopharyngeal nerve to centers within the medulla

**48) The sphenoid sinuses?**

**Anatomy**

- a. Are in the bone directly beneath the pituitary gland
- b. Drain into the middle nasal meatus
- c. Drain the pterygopalatine fossa via the sphenopalatine foramen
- d. Are not connected directly to the nasal cavity
- e. Supplied by middle ethmoidal nerve

**49) All the following are features of lung squamous cell carcinoma, except?**

- a. More common in men than women.
- b. Closely correlated with smoking history.
- c. Arise centrally in major bronchi and spread to local hilar nodes.
- d. They disseminate outside the thorax later than do other histologic types.
- e. Large lesions undergo central necrosis, giving rise to central scar.

**50) Considering the pathogenesis of chronic bronchitis, one of the following is incorrect?**

- a. Initiating factor is exposure to irritating substances (90% smokers).
- b. Mucus hypersecretion is a late feature beginning in the large airways.
- c. Infections does not initiate chronic bronchitis but producing acute exacerbations.
- d. Cigarette smoke increasing the risk of infection.
- e. Histamine and IL-13 are involved in submucosal gland hypertrophy.

Patho

**51) One of the following pairs between the emphysema type and its feature is wrongly matched?**

- a. Panacinar emphysema: affects upper lung zones.
- b. Panacinar emphysema: associated with alphas<sub>1</sub>-anti-trypsin deficiency.
- c. Centriacinar emphysema: most common type in cigarette smokers.
- d. Distal acinar emphysema: present with spontaneous pneumothorax.
- e. Irregular emphysema: clinically asymptomatic and associated with scarring.

Patho

**Physio**

**52) Ventilation & perfusion relationships vary in the upright lung?**

- a. ventilation is greater at apex than base
- b. perfusion is greater at apex than base
- c. V/Q approaches unity at apex
- d. V/Q is more than 3 times greater at apex than base
- e. V/Q is greater at base of lung than apex

**Pharma**

**53) All following combinations about treatment of asthma are TRUE EXCEPT?**

- a. Salmeterol- short acting beta 2 agonist
- b. Montelukast- Leukotrine antagonist
- c. Omalizumab- Monoclonal antibody
- d. Ipratropium- Antimuscarinic drug
- e. Cromoglicate- Anti inflammatory agent

54) The surfactant proteins, choose the wrong statement of the following?

- a. SP-A and SP-D bind to pathogens causing its neutralization
- b. SP-B is the only surfactant protein essential for life
- c. SP-D & SP-A are hydrophilic protein
- d. SP-A and SP-C have overlapping surface film-promoting properties
- e. SP-C bind bacterial lipopolysaccherides thus play a role in pulmonary host defence

55) Which of the following is NOT TRUE regarding a patient has  $PO_2 = 80\text{mmHg}$  and  $O_2\text{ sat} = 95\%$ ?

- a. Left shift oxyhemoglobin dissociation curve
- b. Oxygen delivery to body tissue is very good
- c. Respiratory alkalosis
- d. An emergency case and need immediate ventilation
- e. The body tissue is hypoxic

56) Lung abscesses may be caused by all of the following EXCEPT?

- a. Septic emboli.
- b. Bronchogenic carcinoma. *Patho*
- c. Aspergillosis.
- d. Dental sepsis.
- e. Anaerobes.

57) A group of people presented with atypical pneumonia and some have hyponatremia, the group had a 3 days meeting in a hotel one weeks ago, some of them mentioned that their rooms showers were dirty and seemed not used for long time, one is WRONG regarding the causative agent? *Micro*

- a. Transmitted via water droplets
- b. Transmitted easily from person to person
- c. Can be quickly diagnosed by detecting specific antigen in urine
- d. Erythromycin (a macrolide) is treatment of choice
- e. Killing the organism is best obtained by chlorinating and heating the water

58) The strongest lung tumors associated with smoking is?

- a. Small cell carcinoma.
- b. Squamous cell carcinoma.
- c. Adenocarcinoma.
- d. Both (A+B).
- e. Both (A+C).

60) A 25 years old man reports to ENT praxis with hoarseness of voice. Indirect laryngoscopy revealed that he is unable to widen his rima glottidis. The muscle most likely to be paralyzed is?

- a. Vocalis
- b. Thyroarytenoid
- c. Oblique Arytenoid
- d. Posterior cricoarytenoid
- e. Cricothyroid

**61) Colonies that are smooth with a grayish- white color and when that colonies pushed with loop, they "scoot" across media, are related to which bacteria?**

Micro

- a. Streptococcus pyogenes
- b. Staphylococci
- c. Moraxella catarrhalis
- d. B. anthracis
- e. Pseudomonas aeruginosa

**62) All of the following can be caused by asbestos exposure except?**

- a. Localized pleural plaques and effusions.
- b. Parenchymal interstitial fibrosis (asbestosis).
- c. Malignant mesothelioma.
- d. Laryngeal Squamous cell carcinoma.
- e. Allergic bronchopulmonary aspergillosis.

**63) Alpha 1-AT in emphysema. choose the wrong statement?**

- a. The most widespread emphysema resulting from alpha 1-AT deficiency resulting in the substitution of lysine for glutamic acid
- b. Alpha 1-AT consist of a single polypeptide chain of 394 amino acid
- c. The gene for alpha1-AT is located on chromosome 14
- d. Methionine 358 of alpha 1-AT is necessary for alpha 1-AT binding to elastase
- e. In a heterozygote, with one normal and one defective gene, the levels of alpha1-AT are not sufficient to protect the alveoli from elastase damage

Pharma

**64) Concerning H1 antagonists, the following drug is safe during pregnancy?**

- a. Meclizine.
- b. Diphenhydramine.
- c. Promethazine.
- d. Hydroxyzine.
- e. Chlorpheniramine.

**65) Regarding Coronaviruses, all are true EXCEPT?**

Micro

- a. It may persist on hard and soft surfaces for hours or up to several days
- b. MERS-CoV is a beta coronavirus of subfamily Coronavirinae
- c. SARS originated in China in 2002
- d. Excessive production of pro-inflammatory cytokines is an underlying cause of disease severity
- e. Remdesivir, a protease inhibitor as well as Lopinavir-ritonavir, polymerase inhibitor can be used in treatment of COVID-19 infection

Physio

**66) The binding of O<sub>2</sub> to haemoglobin in humans is favoured by?**

- a. The carbamino reaction
- b. High altitude adaptation
- c. High pH
- d. High CO<sub>2</sub> concentration
- e. High BPG concentration

**67) All are correct regarding Diphtheria EXCEPT?** Micro

- a. Local effects including pharyngitis or tonsillitis
- b. Associated cervical adenitis is common
- c. The membrane is coughed up after 20 to 25 days
- d. Bull neck in severe cases
- e. Diphtheritic myocarditis in severe cases

Physio

**68) With regard to control of ventilation?**

- a. Impulse from pneumotaxic center may reduce inspiratory phase
- b. Apneustic center is in the medulla
- c. The pontine respiratory center is responsible for intrinsic respiratory rhythm
- d. The expiratory area is active during normal breathing
- e. Firing of the carotid body chemoreceptor respond most to changes in pCO<sub>2</sub>.

69) The thyrohyoid membrane is pierced by?

Anatomy

- a. Superior thyroid artery
- b. Superior laryngeal artery
- c. Superior thyroid vein
- d. External branch of laryngeal nerve
- e. Recurrent laryngeal nerve

**70) When foreign objects are aspirated into the trachea, they will usually pass into the right primary bronchus because?**

- a. It is larger, straighter and shorter than the left
- b. It is more curved, longer and smaller than the left
- c. It is straighter, longer and larger than the left
- d. It is at a 90 degree angle to the trachea
- e. It is the continuation of the trachea

Anatomy

**71) One of the following in INCORRECT about Bronchiectasis?**

- a. Airways are dilated up to four times their usual diameter mostly in the upper lobes.
- b. Bronchiectasis mainly is a permanent dilation of bronchi and bronchioles.
- c. Both obstruction and chronic infection contribute to bronchiectasis.
- d. Severe suppurative Staphylococcus aureus infection is associated with bronchiectasis.
- e. Primary ciliary dyskinesia is a rare disorder associated with bronchiectasis and sterility in males.

**72) In a person with ventilation-perfusion mismatching?**

- a. Regions with ventilation-perfusion ratios of 0.3 are dead-space effect regions
- b. Regions with low ventilation-perfusion ratios are the main cause of hypoxia in a patient with severe pneumonia
- c. Regions with low ventilation-perfusion ratios causes arterial hypercapnea and hypoxemia.
- d. ARDS is an example of dead space effect.
- e. Oxygen therapy can not improve hypoxemia in dead-space effect regions.

**73) The typical intercostal nerves, CHOOSE the most appropriate answer:**

- a. Have special characters differ it from atypical ones
- b. Are the 2nd -6th intercostal nerves
- c. Supply the thoracic wall and all thoracic organs
- d. The 4th intercostal artery is a typical one
- e. The 5th intercostal nerve is a typical intercostal nerve.

Anatomy

**74) The following are reasons for making TB as a re-emerging major public health problem worldwide EXCEPT?**

- a. Poorly managed tuberculosis control programs
- b. expenses and fails of treating multi-drug resistant cases of tuberculosis
- c. The growing problem of HIV/AIDS
- cl. Increase in life expectancy of the population
- e. Small family size

**75) Which of the following is NOT Consistent with 2,3-DPG?**

- a. Increasing oxygen affinity to hemoglobin
- b. Chronic hypoxia
- c. COPD
- d. Very high altitude
- e. Opposed by a left shift of the oxyhaemoglobin dissociation curve as a result of the respiratory alkalosis at very high altitude

**76) The culture medium for legionella pneumophila is? Micro**

- a. Buffered charcoal yeast extract agar with iron and cysteine
- b. L J medium
- c. Blood agar
- d. Nutrient agar
- e. Thiosulphate citrate bile sucrose agar

Pharma

**77) All the following drugs are second generation of h1-antagonists EXCEPT?**

- a. Hydroxyzine.
- b. Loratadine.
- c. Cetirizine.
- d. Fexofenadine.
- e. Azelastin.

**78) One of the following paraneoplastic syndromes is associated with lung Squamous cell carcinoma?**

- a. Cushing syndrome.
- b. Syndrome of inappropriate secretion of antidiuretic hormone.
- c. Hypercalcemia.
- d. Peripheral neuropathy.
- e. Polymyositis.

79) All following matches regarding treatment of respiratory tract infections EXCEPT?

- a. Acute sinusitis- amoxicillin
- b. Otitis media- Co-amoxiclav
- c. Streptococcus tonsillitis- phenoxymethylpenicillin
- d. Chronic bronchitis- tetracycline
- e. Chronic sinusitis- cotrimoxazole

80) Which of the following statements concerning the binding of oxygen by haemoglobin is correct?

- a. The Bohr effect results in a lower affinity for oxygen at high pH values.
- b. Carbon dioxide increases the oxygen affinity of haemoglobin.
- c. The oxygen affinity of haemoglobin increases as the percent saturation increases.
- d. BPG is a positive effector of haemoglobin binding to oxygen.
- e. Oxyhemoglobin and deoxyhemoglobin have the same affinity for protons (H<sup>+</sup>).

