# **Past papers**

- 1) Which of the following is wrong regarding chronic bronchitis:
- A) Caused by air pollutants
- B) May be manifested by wheezing
- C) Obstructive bronchitis manifest as blue bloaters
- D) Significant airway obstruction results in almost always complicated by chronic bronchiolitis

## ANS: D

2) Which of the following is correct about TB :

- A) Primary TB is not infective
- B) Regional lymph nodes are less involved in secondary TB
- C) 80% of primary TB becomes secondary

# ANS: B

3) Which of the following is correct about TB (again):

- A) Secondary TB is localized in the lower lobe
- B) Mycobacterium Bovis causes oropharyngeal TB
- C) Mycobacterium Avium Complex causes disease in 3% of AIDS patients

# ANS: B

4) Which of the following is true regarding pulmonary embolism:

- A) The more peripheral the embolic occlusion the lower the risk for infarction
- B) 40% of them are silent
- C) Consequences are only determined by the size of the embolus
- D) Small emboli cause alveolar hemorrhage

## ANS: D

5) Which of the following is true about Goodpasture syndrome:

- A) Autoimmune disease that affects the lungs only
- B) IgG granular deposition in the lung is diagnostic
- C) Results in necrotizing hemorrhage interstitial pneumonitis
- D) Predominance in females

ANS: C

6) Choose the true sentence:

- A) Hyalinized collagen fibers are found in silicosis
- B) asbestos bodies are golden brown rounded structures
- C) pleural plaques contain Ca++ and iron

ANS: A

7) Mass that contains large cells, with large nuclei and prominent nucleoli, and show no glandular or squamous differentiation, what is the diagnosis?

- A) Squamous cell carcinoma
- B) Large cell carcinoma
- C) Carcinoid tumor
- D) Small cell carcinoma

ANS: B

- 8) True about sarcoidosis:
- A) Higher prevalence in smokers
- B) Mainly occupational disease
- C) In liver it manifests as granulomas surrounding central veins
- D) In more than 50%, it causes granuloma in spleen

ANS: D

- 9) True about adenocarcinoma:
- A) Forms large masses
- B) Centrally located
- C) It has a wide range of metastasis in a short time

ANS: C

- 10) True about lung tumors:
- A) They have good prognosis
- B) Adenocarcinoma is the most common in smokers
- C) Women are more susceptible to carcinogens in tobacco than men

ANS: C

11) Long case of a tumor that begins centrally in a localized area and spread widely to the pleura (pleural cell proliferation), this case is associated with?

A) Distant metastasis

B) Adenocarcinoma

C) Extensive pleural fibrosis

ANS: C

12) Interalveolar fibrosis with patchy air space consolidation:

A) Cryptogenic Organizing pneumonia

B) Carcinoid syndrome

C) Nonspecific interstitial pneumonia

ANS: A

13) 51-year-old patient presented with right chest pain that increases with inspiration which one is the less likely diagnosis:

A) Pneumonia

B) Pulmonary embolism

C) MI

D) Pneumothorax

ANS: C

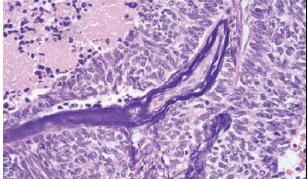
14) What's specific about sarcoidosis?

- A) Non-caseating granuloma
- B) Schaumann bodies
- C) Asteroid bodies
- D) None of the above

## ANS: D

15) Case about man, heavy smoker, presented to the clinic with nausea, vomiting and malaise. A clinical history and physical examination and lab results revealed signs and symptoms consistent with the syndrome of inappropriate antidiuretic hormone. A chest X-Ray showed an ill-defined 5 cm mass involving the left hilum of the lung, lung biopsy was performed and captured in the figure below, based on your diagnosis, which of the following statement is CORRECT?

- A) Surgery is a curative treatment
- B) It's an asbestos related tumor
- C) Early involvement of lymph nodes
- D) It's an undifferentiated tumor
- E) This tumor never metastasizes



#### ANS: C

16) A 40-year-old man, non-smoker, presented with increasing dyspnea for the past 5 years, the disease involves mainly the lower lung lobe, pulmonary function test showed an obstructive pattern, A lung biopsy showed enlarged air spaces and destruction of alveolar wall without fibrosis, what is the most likely cause of this disease?

- A) Type-1 IgE mediated hypersensitivity reaction
- B) Genetic abnormality resulting in primary ciliary dyskinesia
- C) Reduced anti-elastase activity
- D) Mucus hypersecretion and outflow obstruction
- E) poorly differentiated adenocarcinoma

ANS: C

17) Regarding bronchiectasis, one of the following statements is CORRECT:

- A) It's a primary inherited pulmonary disease
- B) considered as reversible obstructive pulmonary disease
- C) Alveolar sacs are the most involved part
- D) Heals with complete resolution and no fibrosis
- E) patient present with cough and purulent sputum

ANS: E

18) Regarding lung tumors, one of the following is CORRECT:

- A) Small cell carcinoma is the most common type
- B) Lung hamartomas are classified as developmental anomalies
- C) Squamous cell carcinoma are the most common tumors in women
- D) Most carcinoids are peripherally located in the lung
- E) Mesothelioma can be epithelial, sarcomatous, or mixed

ANS: E

19) Regarding pneumoconiosis, one of the following is CORRECT:

- A) Coal worker pneumoconiosis is associated with increased risk of lung cancer
- B) Pleural plaques are the most common manifestation of asbestos exposure
- C) pneumoconiosis is defined as chronic restrictive lung disease with unknown etiology
- D) Pulmonary anthracosis is associated with progressive dyspnea and cough

ANS:

20) Case about man with chronic cough and weight loss, clopping of fingers, X-Ray shows left sub-pleural proliferation, lung biopsy shows glandular formation, TTF-1 immune stain is positive, what is your diagnosis?

- A) Adenocarcinoma
- B) Squamous cell carcinoma
- C) Small cell carcinoma
- D) Large cell neuroendocrine carcinoma
- E) Sarcomatous mesothelioma

#### ANS: A

21) Regarding sarcoidosis one of the following is CORRECT:

A) hypercalcemia in sarcoidosis isn't related to bone destruction

- B) the presence of non-caseating granuloma in lung biopsy is diagnostic
- C) Asteroid bodies are laminated concretions that contain calcium
- D) The non-caseating granulomas are centered within the alveolar spaces
- E) Corneal opacification are the most common presentation of eye involvement

ANS: A

22) Regarding pulmonary embolism, which statement is correct:

- A) Large saddle PE are associated with no histologic alteration
- B) Most PE arise from thrombi in the heart ventricle
- C) Pulmonary infracts are usually in the upper lobe
- D) The most common symptom of PE is progressive dyspnea
- E) Bone marrow embolism is common in IV drug abusers

ANS: A

23) Case about man with increasing dyspnea, smoker for 25 years, physical examination shows decreased breathing sound aver the upper lung, radiography shows hyperventilation, pulmonary function test shows obstructive pattern, which structure is mostly affected by this disease?

- A) Main bronchi
- B) Terminal bronchioles
- C) Respiratory bronchioles
- D) Alveolar duct and sack
- E) Pleural lining

ANS: C

24) Which of the following is associated with slowly progressive restrictive lung disease showing whorls of concentrically arranged hyalinized collagen bundles surrounding amorphous center?

- A) Coal dust
- B) Tobacco smoke
- C) Mushroom
- D) Crystalline silica
- E) Asbestos

ANS: D

25) Regarding the pathogenesis of atopic asthma one of the following statements is correct:

A) the initial response upon first exposure is associated with type-1 helper lymphocyte activation

B) IL-4 & IL-5 are secreted from alveolar macrophages during the early phase response C) phago-lysosomal maturation arrest is essential in the pathogenesis during early phase

D) Eotaxin is a potent chemoattractant and activator of eosinophils in late phase

E) early phase is triggered by antigen induced crosslinking of IgG bound to receptor on mast cells

ANS: D

26) Which of the following diseases affect the lower lung lobe?

A) Distal acinar emphysema

B) Silicosis

- C) Bronchiectasis
- D) Coal worker pneumoconiosis
- E) Hypersensitivity pneumonitis

ANS: C

27) Regarding primary pulmonary TB which is correct?

A) T-cell mediated immune response develops within the first 30 minutes after exposure

- B) Bacteremia is usually asymptomatic or associated with mild symptoms
- C) The first step after mycobacteria entry is the activation of phagolysosome killing
- D) TNF mobilizes antimicrobial defensins against the mycobacteria
- E) IL-12 stimulate expression of inducible nitric oxide synthase to produce nitic oxide

ANS: B

28) Regarding TB, one of the following is correct?

- A) Mycobacterium avium complex is associated with intestinal TB
- B) Pulmonary TB is associated with extensive lymph node involvement
- C) 95% of primary TB causes develops a progressive disease
- D) Apical lung involvement is characteristic of secondary TB
- E) Lung cavitation is more common during primary disease

#### ANS: D

29) Regarding cobble stone appearance of the pleural surface which statement is correct?

- A) Associated with usual interstitial pneumonia pattern (UIP) of fibrosis
- B) Characteristic of pleural involvement by malignant mesothelioma
- C) Happens due to lung hyperinflation and air trapping
- D) Associated with miliary pulmonary tuberculosis
- E) Characteristic of non-specific interstitial pneumonia (NISP)

### ANS: A

30) Regarding pneumoconiosis which is correct?

- A) The most dangerous mineral dust particle range in size between 5-10  $\mu m$
- B) Tobacco smoking worsens the effect of all inhaled minerals dust except for asbestosis
- C) Simple coal worker pneumoconiosis is associated with centre-acinar emphysema
- D) The pure form of quartz is less fibro-genic and toxic than mixed form
- E) Asbestosis is associated with increased risk of primary tuberculosis

ANS: C

31) Which of the following is true:

ANS: coal worker's pneumoconiosis is found in the upper lobes of the lung, so are silicosis nodules

32) Which of the following is true:

ANS: Adenocarcinoma is the most common lung tumor

33) Which of the following is wrong about emphysema:

ANS: Usually in the lower lobes

34) Which of the following is wrong about ARDS:

ANS: In most patients, after the acute phase pulmonary function is restored in a year or two

35) Which of the following is wrong about the lungs:

ANS: Obstructive overinflation is due to complete destruction of affected area

36) Which of the following is wrong about bronchiectasis: ANS: Diagnosis is only through biopsy

37) Which of the following is wrong about sarcoidosis: ANS: Subcutaneous nodules indicate acute sarcoidosis

38) Which of the following is wrong about Pigeon Breeder's lung disease: ANS: Predominant cell in bronchioalveolar lavage is neutrophil

39) Which of the following is wrong about restrictive lung diseases: ANS: Hypersensitivity pneumonitis is caused by type 1 hypersensitivity

40) Temporal heterogeneity is found in: ANS: Idiopathic pulmonary fibrosis

41) Which of the following is wrong about silicosis: ANS: A definitive correlation with lung cancer is proven

42) Which of the following is wrong about goodpasture disease: ANS: Only treatment is renal transplant (Or lung transplant)

43) Which of the following is wrong about IPF: ANS: Patients have productive cough

44) Which of the following is wrong about chronic bronchitis: ANS: Decreased number of goblet cells

45) Which of the following is correct about paraneoplastic syndromes: ANS: Clubbing of the fingers with 5cm Adenocarcinoma

46) A 60 years old smoker, with a central lung tumor, it's most likely to be: ANS: Squamous cell carcinoma

47) Which of the following is correct about small cell carcinoma: ANS: No keratin histologically