

PULMONARY MEDICINE

- You see a 68-year-old man in clinic, with a 40 (cigarette) pack year history, who has been experiencing reathlessness on exertion and a productive cough of white sputum over the last four months. You assess his spirometry results which reveal an FEV1/FVC of 51 per cent with minimal reversibility after a 2-week trial of oral steroids. Cardiological investigations are normal. Which of the following is the most likely diagnosis?

 - Asthma
 - Chronic obstructive pulmonary disease (COPD)
 - Left ventricular failure
 - Chronic bronchitis
 - Lung fibrosis
- A 67-year-old woman is admitted to accident and emergency with pyrexia (38.1°C) and a cough productive of green sputum. The observations show a pulse rate of 101, BP 80/60 and respiratory rate of 32. She is alert and orientated in space and time. Blood results reveal a WCC of 21, urea of 8.5 and chest x-ray shows a patch of consolidation in the lower zone of the right lung. She is treated for severe community-acquired pneumonia. Which of the following is the correct calculated CURB-65 score?

 - 6
 - 8
 - 4
 - 0
 - 1
- Which of the following organisms would typically be found in a patient with atypical community-acquired pneumonia?

 - Staphylococcus aureus
 - Pseudomonas spp.
 - Streptococcus pneumonia
 - Legionella pneumophilia
 - Haemophilus influenza
- You are asked to interpret an arterial blood gas of a 76-year-old patient who was admitted to accident and emergency with an acute onset of breathlessness and low oxygen saturations. The test was taken on room air and read as follows: pH 7.37, PO₂ 7.8, PCO₂ 4.1, HCO₃ 24, SO₂ 89 per cent. Choose the most likely clinical interpretation from these arterial blood gas results:

 - Compensated respiratory acidosis
 - Type 1 respiratory failure
 - Compensated respiratory alkalosis
 - Type 2 respiratory failure
 - None of the above
- A 54-year-old woman is seen in clinic with a history of weight loss, loss of appetite and shortness of breath. Her respiratory rate is 19 and oxygen saturations (on room air) range between 93 and 95 per cent. On examination, there is reduced air entry and dullness to percussion on the lower to midzones of the right lung. There is also reduced chest expansion on the right. From the list below, select the most likely diagnosis:

 - Right middle lobe pneumonia
 - Pulmonary embolism
 - Right-sided pleural effusion
 - Right-sided bronchial carcinoma
 - Right lower lobe pneumonia
- A 45-year-old woman with unexpected weight loss, loss of appetite and shortness of breath presents to you in clinic. On examination, there is reduced air entry and dullness to percussion in the right lung. A pleural tap is performed and the aspirate samples sent for analysis. You are told that the results reveal a protein content of 30 g/L. From the list below, select the most likely diagnosis:

 - Bronchogenic carcinoma
 - Congestive cardiac failure
 - Liver cirrhosis
 - Nephrotic syndrome
 - Meig's syndrome
- You are discussing a patient with your registrar who has become acutely short of breath on the ward. After performing an arterial blood gas, you have high clinical suspicion that the patient has a pulmonary embolism. Which of the following is the investigation of choice for detecting pulmonary embolism?

 - Magnetic resonance imaging (MRI) of the chest
 - High-resolution CT chest (HRCT)
 - Chest x-ray
 - Ventilation/perfusion scan (V/Q scan)
 - CT pulmonary angiogram (CT-Pa)
- A 28-year-old man has been newly diagnosed with asthma. He has never been admitted to hospital with an asthma exacerbation and experiences symptoms once or twice a week. You discuss the treatment options with him. His peak expiratory flow reading is currently 85 per cent of the normal predicted value expected for his age and height. Which of the following is the most appropriate first step in treatment?

 - Short-acting beta-2 agonist inhaler
 - Long-acting beta-2 agonist inhaler
 - Low-dose steroid inhaler
 - Leukotriene receptor antagonists
 - High-dose steroid inhaler
- You see a 46-year-old man who has presented to accident and emergency with an acute onset of shortness of breath. Your registrar has high clinical suspicion that the patient is suffering from a pulmonary embolism and tells you that the patient's ECG has changes pointing to the suspected diagnosis. From the list below, which of the following ECG changes are classically seen?

 - Inverted T-waves in lead I, tall/tented T-waves in lead III and flattened T-waves in lead III
 - Deep S-wave in lead I, pathological Q-wave in lead III and inverted T-waves in lead III
 - Flattened T-wave in lead I, inverted T-wave in lead III, and deep S-wave in lead III
 - No changes in lead I, deep S-wave in lead III
 - Deep S-wave in lead I with no changes in lead III
- Which of the following arterial blood gas results, taken on room air, would you expect to see in a 67-year-old patient who has been suffering with COPD for two years and is not on home oxygen?

 - pH 7.35, PO₂ 11, PCO₂ 5.3, HCO₃ 24, SO₂ 98 per cent
 - pH 7.47, PO₂ 12, PCO₂ 5.1, HCO₃ 30, SO₂ 97 per cent
 - pH 7.44, PO₂ 8.3, PCO₂ 6.7, HCO₃ 28, SO₂ 93 per cent
 - pH 7.31, PO₂ 10.2, PCO₂ 6.8, HCO₃ 25, SO₂ 95 per cent
 - pH 7.30, PO₂ 11.5, PCO₂ 5.2, HCO₃ 18, SO₂ 96 per cent

11. You see a 46-year-old woman on your ward who has been diagnosed with bronchiectasis following a three-month history of a mucopurulent cough. Which of the following from the list below is not a cause of bronchiectasis?
- Kartagener's syndrome
 - Cystic fibrosis
 - Pneumonia
 - Left ventricular failure
 - Bronchogenic carcinoma
12. A 30-year-old man presents to your clinic with a cough and finger clubbing. From the list below, which of these answers is not a respiratory cause of finger clubbing?
- Empyema
 - Mesothelioma
 - Bronchogenic carcinoma
 - Cystic fibrosis
 - COPD
13. A 55-year-old woman, who has never smoked, presents to you on the ward with a history of weight loss, decreased appetite and finger clubbing. You are told that her chest x-ray revealed opacity in the hilar region of the right lung suggesting a bronchogenic carcinoma. She is currently awaiting a CT-chest with bronchoscopy to follow. From the list below, select the most likely diagnosis:
- Squamous cell carcinoma of the lung
 - Adenocarcinoma of the lung
 - Small cell carcinoma of the lung
 - Large cell carcinoma of lung
 - Carcinoid tumour of the lung
14. You see a 28-year-old man, with no past medical history, in accident and emergency who developed an acute onset of pleuritic chest pain and shortness of breath while playing football. On examination, oxygen saturations are 93 per cent on room air, respiratory rate 20 and temperature is 37.1°C. There is decreased expansion of the chest on the left side, hyper-resonant to percussion and reduced air entry on the left. The most likely diagnosis is:
- Left-sided pneumothorax
 - Left-sided pneumonia
 - Left-sided pleural effusion
 - Lung fibrosis
 - Traumatic chest injury
15. You are asked to request imaging for a patient with a suspected pneumothorax who you have just examined in accident and emergency. Which of the following would be the most appropriate first step imaging modality?
- CT-chest
 - Ultrasound chest
 - Chest x-ray
 - V/Q scan
 - CT-PA
16. A 68-year-old woman has presented with acute onset shortness of breath 24 hours after a long haul flight. Her blood results show a raised D-dimer level and the arterial blood gas shows a PO₂ of 8.3 kPa and PCO₂ of 5.4 kPa. Your consultant suspects a pulmonary embolism and the patient needs to be started on treatment while a CT-PA is awaited. From the list below, please select the most appropriate treatment regime.
- Commence loading with warfarin and aim for an international normalized ratio (INR) between 2 and 3
 - Thromboembolic deterrent stockings
 - Aspirin 75 mg daily
 - Prophylactic dose subcutaneous low molecular weight heparin loading with warfarin and aim for INR between 2 and 3
 - Treatment dose subcutaneous low molecular weight heparin loading with warfarin and aim for INR between 2 and 3
17. You see a 67-year-old man who has been referred to the chest clinic following a three-month history of weight loss and signs which may suggest a Pancoast's tumour. Which of the following symptoms from the list below is not associated with a Pancoast's tumour?
- Hoarse voice
 - Miosis
 - Anhydrosis
 - Exophthalmos
 - Ptoisis
18. A 50-year-old Afro-Caribbean man, with no past medical history, presents with a four-month history of dry cough and shortness of breath on exertion. The patient's GP referred him to the chest clinic after performing blood tests which revealed a raised erythrocyte sedimentation rate (ESR) and serum angiotensin-converting enzyme (ACE) level. You review the patient's chest x-ray which reveals bilateral hilar lymphadenopathy. From the list below, select the most likely diagnosis:
- Rheumatoid arthritis
 - Systemic lupus erythematosus (SLE)
 - Sarcoidosis
 - Idiopathic pulmonary fibrosis
 - Bronchogenic carcinoma
19. A 67-year-old man presents with dyspnoea and fatigue with signs of a raised jugular venous pressure (JVP), hepatomegaly and peripheral oedema. The patient has a longstanding history of COPD. You suspect cor pulmonale. Which of the following is not a cause of cor pulmonale?
- Pulmonary fibrosis
 - Primary pulmonary hypertension
 - Myasthenia gravis
 - COPD
 - Multiple sclerosis
20. You are told by your registrar that a 69-year-old man has been admitted to the chest ward with dyspnoea, cyanosis and finger clubbing. His chest x-ray shows bilateral lower zone reticulo-nodular shadowing. From the list below, which is the most likely diagnosis?
- Bronchiectasis
 - Pulmonary fibrosis
 - Bronchogenic carcinoma
 - Bronchitis
 - COPD
21. A 25-year-old woman is admitted to accident and emergency with a severe exacerbation of asthma. On examination, her respiratory rate is 30, oxygen saturations are 95 per cent on 15 L O₂ and temperature is 37.2°C. As you feel the peripheral pulse, the volume falls as the patient inspires. Which of the following explains this clinical sign?
- Increased left atrial filling pressures on inspiration
 - Decreased right ventricular filling pressures on inspiration
 - Peripheral vasodilation
 - Decreased right atrial filling pressures on inspiration
 - Decreased left atrial filling pressures on inspiration

A 55-year-old man, who has never smoked and with no past medical history, has been diagnosed with right basal community-acquired pneumonia. There are minimal changes on his chest x-ray and bloods reveal a neutrophil count of 8.2 and a C-reactive protein (CRP) of 15. He has no drug allergies. Although he has a productive cough of green sputum, his respiratory rate is 16, oxygen saturations are 97 per cent on room air and his temperature is 37.4°C. You are asked to place him on treatment. Which of the following treatment options would be appropriate for this patient?

- Oral amoxicillin
- Oral erythromycin
- Intravenous ertapenem
- Intravenous ertapenem with a macrolide (e.g. clarithromycin)
- Intravenous tazocin

23. A 56-year-old woman who has recently been discharged from your ward, with oral antibiotics for right basal community-acquired pneumonia, is re-admitted with transient pyrexia and shortness of breath. She is found to have a right-sided pleural effusion which is drained and some pleural aspirate sent for analysis. The results reveal an empyema. Which of the following, from the pleural aspirate analysis, would typically be found in a patient with an empyema?

- pH 7.2, ↑ LDH, ↑ glucose
- pH 7.2, ↑ LDH, ↑ glucose
- pH 7.2, ↓ LDH, ↓ glucose
- pH 7.2, ↑ LDH, ↓ glucose
- pH 7.2, ↔ LDH, ↔ glucose

24. You are told that a patient in clinic has been diagnosed with cystic fibrosis using the sodium chloride sweat test. Which of the following results from the latter test would indicate a positive diagnosis of cystic fibrosis?

- Sodium chloride 40 mmol/L
- Sodium chloride 60 mmol/L
- Sodium chloride 50 mmol/L
- Sodium chloride 60 mmol/L
- Sodium chloride 30 mmol/L

25. Which of the following organisms, responsible for causing chronic pneumonia, is most commonly found in patients with longstanding cystic fibrosis?

- L. pneumophila*
- S. pneumonia*
- Burkholderia cepacia*
- Pseudomonas aeruginosa*
- H. influenza*

26. From the list below, which of the following carcinomas of the lung is highly associated with exposure to asbestos?

- Adenocarcinoma
- Small cell carcinoma
- Squamous cell carcinoma
- Malignant mesothelioma
- Large cell carcinoma

27. A 45-year-old man develops facial swelling and breathlessness. His chest X-ray reveals paratracheal lymphadenopathy. Which of the following statements is most accurate regarding the superior vena caval obstruction?

- the most common cause is squamous cell carcinoma
- treatment of choice is radiotherapy
- it may be associated with voice hoarseness

- it is associated with Kussmaul's sign
- the commonest symptom is stridor

28. You see a 70-year-old man diagnosed with hypersensitivity pneumonitis following a four-month history of shortness of breath at rest and cyanosis. Which of the following does not fall under the category of hypersensitivity pneumonitis?

- Coal worker's lung
- Pigeon fancier's lung
- Mushroom picker's lung
- Farmer's lung
- Malt worker's lung

29. A 44-year-old plumber has a 4-day history of fever and generalized myalgia. Two days ago he developed a dry cough coupled with mild dyspnoea and has been feeling very lethargic. On examination his temperature is 38.5°C, respiratory rate 20, oxygen saturations ranging between 93 and 96 per cent on room air and auscultation of the chest reveals bibasal crackles. Bloods show a raised white cell count of 18.2 and neutrophil count of 11.0, CRP of 90 and a raised ALT of 261 and ALP 96. Chest x-ray reveals bibasal consolidation. The patient is treated with antibiotics for bibasal pneumonia. From the list below, select the most likely organism responsible for the pneumonia:

- Pseudomonas* spp.
- S. pneumoniae*
- Mycoplasma pneumoniae*
- L. pneumophila*
- S. aureus*

30. Which of the drugs below would be the most appropriate to treat pulmonary *Aspergillus* spp. infection?

- Amoxicillin
- Erythromycin
- Amphotericin B
- Flucloxacillin
- Fluconazole

31. 68-year-old woman is admitted to accident and emergency with shortness of breath and cough. She has been a smoker for 25 years, smoking on average 20 cigarettes a day, and is a known COPD patient with home oxygen. The observations read a pulse rate of 101, blood pressure of 100/60, respiratory rate of 20, oxygen saturations of 88 per cent on air and temperature of 37.2°C. On auscultation you hear bilateral expiratory wheeze. She is prescribed nebulizers (salbutamol 5 mg ipratropium 500 g) with oxygen and chest x-ray requested. Intravenous access has been established and bloods sent for analysis. From the list below, select the most appropriate next step in this patient's management plan.

- Arterial blood gas sampling
- Peak flow assessment
- Urine dip microscopy and sensitivity
- Start non-invasive ventilation (e.g. BIPAP)
- Obtain sputum for microscopy, culture and sensitivity (MC&S)

32. During the consultant ward round, you see a 78-year-old woman who is being investigated for hyponatraemia, weight loss and haemoptysis. A mass lesion was detected on a CT-chest scan which has been biopsied and sent for histological analysis. Your consultant has a high suspicion that the patient may have bronchogenic carcinoma. From the list below, select the most likely type of bronchogenic carcinoma that would explain the above patient's symptoms:

- Large cell carcinoma
- Small cell carcinoma

- c. Adenocarcinoma
d. Squamous cell carcinoma
e. Alveolar cell carcinoma
33. The severity of COPD is assessed using post bronchodilator spirometry analysis. From the list below, select the values that you would expect to see in a patient with moderate COPD.
- FEV1/FVC 0.7, FEV1 per cent predicted 30–49 per cent
 - FEV1/FVC 0.7, FEV1 per cent predicted ≥ 80 per cent
 - FEV1/FVC 0.7, FEV1 per cent predicted 30 per cent
 - FEV1/FVC 0.7, FEV1 per cent predicted 50–79 per cent
 - FEV1/FVC 0.7, FEV1 per cent predicted 60–70 per cent
34. A 58-year-old man with known COPD, diagnosed eight months ago, attends your clinic with persistent shortness of breath despite stopping smoking and using his salbutamol inhaler (given to him at the time of diagnosis), which he finds he is using more frequently. You assess the patient's lung function tests that have been recorded just before he saw you in clinic on this occasion. His FEV1 65 per cent of the predicted value. Oxygen saturations are 95 per cent on room air, respiratory rate in 18, and his temperature is 37.1°C. From the list below, select the next most appropriate step in this patient's management.
- 40 mg daily oral prednisolone for 5 days
 - Start long-term oxygen therapy
 - Start inhaled corticosteroid therapy
 - Add oral theophylline therapy
 - Add a long-acting 2 agonist inhaler
35. A 58-year-old man is admitted with a mild exacerbation of asthma. He suffers with hypertension which is controlled with medication. He was given 5 mg salbutamol and 500 g ipratropium nebulizers, on route to hospital, by paramedics and has received 'back to back' salbutamol 5 mg nebulizers since admission to accident and emergency. The patient was then sent to the acute medical unit where he was given regular nebulizers along with his regular antihypertension medication. Before he was discharged, his serum potassium reading was 2.9. Select, from the list below, the drug which is most likely to have caused the hypokalaemia.
- Ipratropium
 - Ramipril
 - Salbutamol
 - Amlodipine
 - Paracetamol
36. A 56-year-old man attends your clinic with a three-month history of a productive cough with blood-tinged sputum, following his return from India. Associated symptoms include lethargy, night sweats and decreased appetite. He is normally fit and healthy with no past medical history. On examination, the patient's chest has good air entry bilaterally with no added sounds and his temperature is 37.3°C. A sputum sample sent from the patient's GP reveals a growth of acid fast bacilli. From the list below, which is the most likely diagnosis?
- Pulmonary embolism
 - Tuberculosis
 - Bronchitis
 - Pneumonia
 - Bronchogenic carcinoma
37. Your clinic patient has been diagnosed with pulmonary tuberculosis (TB) following a three-month history of haemoptysis and fever. The patient is due to start on treatment and you are asked by your registrar which of the following regimes is the most suitable. The patient has no known drug allergies and, in addition, liver function tests and urea and electrolytes results are all within normal ranges. From the list below, which of the following answers is the most appropriate and recommended treatment regimen for this patient?
- Three months of isoniazid, rifampicin, ethambutol and pyrazinamide, followed by three months of isoniazid and rifampicin
 - Four months of isoniazid and rifampicin, followed by two months of isoniazid, rifampicin, ethambutol and pyrazinamide
 - Six months of isoniazid, rifampicin, ethambutol and pyrazinamide
 - Six months of isoniazid and rifampicin
 - Two months of isoniazid, rifampicin, ethambutol and pyrazinamide, followed by four months of isoniazid and rifampicin
38. A 45-year-old man with diabetes, diagnosed with pulmonary TB who started treatment two months ago, presents to you with a week's history of pins and needles in his hands and feet with associated numbness. He tells you that his symptoms started since he stopped taking the vitamins given to him at the start of his TB treatment. From the list below, which of the following drugs is responsible for the symptoms described by the patient?
- Pyrazinamide
 - Rifampicin
 - Ethambutol
 - Isoniazid
 - None of the above
39. A 37-year-old woman is admitted to accident and emergency with severe facial burns. Despite prompt management, she develops acute respiratory distress syndrome (ARDS). Which of the following is not associated with the diagnostic criteria for ARDS?
- Bilateral infiltrates on chest x-ray
 - Acute onset
 - Pulmonary capillary wedge pressure 19
 - Refractory hypoxaemia (PaO₂:FiO₂ 200)
 - Lack of clinical congestive heart failure
40. You see a 76-year-old woman in accident and emergency who has been admitted with a 1-day history of shortness of breath and pyrexia (38.4°C). The patient's past medical history includes hypertension, stroke and insulin-dependent diabetes. She has no known drug allergies. The nursing staff report that the patient vomited after her lunchtime meal yesterday. On examination the patient's respiratory rate is 26, oxygen saturations 93 per cent on room air. On auscultation of the chest, you hear right basal crackles. You suspect that this patient is suffering from aspiration pneumonia. From the list below, which is the most appropriate antibiotic regimen for this patient?
- Intravenous cefuroxime and metronidazole
 - Oral amoxicillin and metronidazole
 - Intravenous clarithromycin
 - Intravenous cefuroxime
 - Oral co-amoxiclav
41. A 7 month old boy is presented to a doctor by his parents with symptoms of recurrent upper respiratory tract infections. No other members of the family suffer from any similar infections. Physical examination showed mild facial hypoplasia. Biochemistry investigations revealed hypocalcaemia. Microbiological investigations were normal and immunoglobulins were within normal limits. The infant's immune function would show the following deficiency:
- Complement Deficiency
 - B cell number and function

- c. T cell number and function
d. Plasma Cell
e. Macrophage number and function
42. **Progressive Massive Fibrosis (PMF) is most likely to be found in which of the following?**
a. Complicated silicosis
b. Extrinsic allergic alveolitis
c. Lobar pneumonia
d. Sarcoidosis
e. Simple coal workers pneumoconiosis
43. **A 17yearold girl with known cystic fibrosis presents with a chest infection. What antibiotic would be most suitable for her?**
a. Augmentin
b. Cefotaxime
c. Ceftazidime
d. Gentamicin
e. Amoxicillin
44. **A 21yearold gentleman with cystic fibrosis presents with infertility. What is the most likely cause for this?**
a. Chronic prostatic insufficiency
b. Failure of development of the vas deferens
c. Increasing alkalinisation of semen
d. Primary failure of testosterone production
e. Production of antisperm antibodies
45. **A 16yearold girl presents with shortness of breath and insomnia prior to an examination. Clinical examination is normal. CXR and PEFr are normal. Which of the following investigations is most suggestive of asthma?**
a. diurnal variation in PEFr > 20%
b. positive skin prick test to common allergens
c. past medical history of hayfever and eczema
d. increased total IgE
e. resolution of symptoms the day after the exam
46. **All of following produce exudative "pleural effusion" except**
a. Rheumatoid Disease
b. Pulmonary infarction
c. Acute Pancreatitis
d. Cardiac Failure
47. **All of the following can precipitate Asthma except :**
a. LRTI
b. Aspirin
c. GERD
d. None
48. **Which is not a feature of kartagener syndrome:**
a. Dextrocardia
b. Situs Inversus
c. Cystic Fibrosis
d. Absence of cilia
49. **What does the abbreviation BIPEP stand for?**
a. Bivalvular positive airway pressure
b. Bilateral preventive aerodynamic pressure
c. Bidirectional positive airway pressure
d. Bilevel positive airway pressure
50. **Unexpectedly increase in diffusing capacity is found in**
a. Cystic fibrosis
b. Pulmonary heamorrhage
c. Bronchitis
d. Bronchiectasis
51. **In a 40 year patient there was pleural fluid .Analysis of this fluid showed a protein ratio of 0.38 and a LDH level of 125 U/L and LDH ratio of pleural fluid to serum of 0.48. The most probable diagnosis is**
a. Uremia
b. Congestive cardiac failure
c. Sarcoidosis
d. Pulmonary embolism
52. **Charcteristic pathological feature of pneumococcal pneumonia**
a. Consolidation
b. interstitial pneumonitis
c. increased eosinophils
d. hilar lymphadenopathy
53. **A 28 yr female , has diarrhoea , confusion , high grade fever with b/l pneumonitis. The diagnosis is**
a. Legionella
b. Neisseria meningitides
c. strep. Pneumoniae
d. H. influenza
54. **DOC for pneumocystic jiroveci is**
a. Clotrimazole
b. cotrimoxazole
c. penicillin
d. fluroquinolones
55. **In "pneumonia severity scale" most important factor is**
a. Age
b. CHF
c. hypothermia
d. hyponatremia
56. **Dose og MgSO4 in asthma is-**
a. 8 gm iv over 20 min
b. 2 gm iv over 40 min
c. 2 gm iv over 20 min
d. 6 gm iv over 20 min
57. **Granulomatous condition showing hypercalcemia are all except**
a. TB
b. sarcoidosis
c. berylliosis
d. SLE
58. **Which of the following is characteristically not associated with development of interstitial lung disease**
a. Organic dust
b. inorganic dust
c. toxic gases eg chlorine , sulphur dioxide
d. tobacco smoke
59. **Which of the following collagen disorder is not associated with pulmonary fibrosis**
a. SLE
b. progressive systemic sclerosis

- c. dermatomyositis
d. RA
60. **A truck driver has chronic cough with fever since one month. Chest x ray showing reticonodular infiltrate in mid and lower zone. Diagnosis is**
a. TB
b. ILD
c. pneumococcal pneumonia
d. pneumocystis carini pneumonia.
61. **“creola bodies “ in sputum pathognomic of**
a. bronchial asthma
b. chronic bronchitis
c. bronchogenic carcinoma
d. pulmonary TB
62. **Charcot leyden crystals are derived from**
a. eosinophil
b. basophil
c. mast cell
d. bronchial goblet cells
63. **To prevent exercise induced asthma drug used is**
a. ipratropium bromide
b. terbutalin
c. epinephrine
d. sodium chromoglycate
64. **Monday chest tightness is characteristic of**
a. asbestosis
b. coal worker pneumoconiosis
c. byssinosis
d. silicosis
65. **Farmers lung is caused by**
a. cryptostroma corticale
b. asperigullus
c. thermophilic actinomycetes
d. grain dust
66. **Most likely precursor to bronchiectasis is**
a. TB
b. carcinoma
c. bronchial adenoma
d. bronchopneumonia
67. **Which of the following terms best describes the antagonism of leukotriene’s ronchoconstrictor effect (mediated at leukotriene receptors) by terbutaline (acting a adrenoceptors) in a patient with asthma?**
a. Pharmacologic antagonist
b. Partial agonist
c. Physiologic antagonist
d. Chemical antagonist
e. Noncompetitive antagonist
68. **If therapy with multiple drugs causes induction of drug metabolism in your asthma patient, it will**
a. Result in increased smooth endoplasmic reticulum
b. Result in increased rough endoplasmic reticulum
c. Result in decreased enzymes in the soluble cytoplasmic fraction
d. Require 34 months to reach completion
e. Be irreversible
69. **The Symptoms of allergenmediated asthma result from which of the following?**
a. Increased release of mediators from mast cells
b. Increased adrenergic responsiveness of the airways
c. Increased vascular permeability of bronchial tissue
d. Decreased calcium influx into the mast cells
e. Decreased prostaglandin production
70. **Which of the following will result from blockade of H2 receptors?**
a. Decreased camp in cardiac muscle
b. Increased camp in cardiac muscle
c. Decreased IP3 in gastric mucosa
d. Increased IP3 in gastric mucosa
e. Increased IP3 in smooth muscle
71. **Toxicities of H2 antihistamines include which one of the following?**
a. Blurred vision
b. Diarrhea
c. Orthostatic hypotension
d. P450 inhibition
e. Sleepiness
72. **A patient undergoing cancer chemotherapy is vomiting frequently. A drug that might help in this situation is**
a. Bromocriptine
b. Cimetidine
c. Ketanserin
d. Loratadine
e. Ondansetron
73. **Which of the following is most useful in the treatment of hyperprolactinemia ?**
a. Bromocriptine
b. Cimetidine
c. Ergotamine
d. Ketanserin
e. LSD
74. **Drugs that can dilate bronchi during an acute asthmatic attack include all of the following except**
a. Epinephrine
b. Terbutaline
c. Nedocromil
d. Theophyline
e. Ipratropium
75. **Which of the following is a nonselective but very potent and efficacious bonchodilator that is not active by the oral route?**
a. Aminophyline
b. Cromolyn
c. Epinephrine
d. Ipratropium
e. Metaproterenol
76. **Which of the following is a prophylactic agent that appears to stabilize mast cells?**
a. Aminophyline
b. Cromolyn
c. Epinephrine

- d. Ipratropium
- e. Metaproterenol

77. Which of the following is a direct bronchodilator that is most often used in asthma by the oral route?
- a. Aminophylline
 - b. Cromolyn
 - c. Epinephrine
 - d. Ipratropium
 - e. Metaproterenol
78. Acute exacerbations of asthma can be triggered by all of the following except
- a. Bacterial or viral pneumonia
 - b. Hypersensitivity reaction to penicillin
 - c. Discontinuation of asthma medication
 - d. Hot, dry weather
 - e. Stressful emotional events
79. Which of the following has overdose toxicity that includes insomnia, arrhythmias, and convulsions?
- a. Aminophylline
 - b. Cromolyn
 - c. Epinephrine
 - d. Ipratropium
 - e. Metaproterenol
80. Which of the following is a very longacting β_2 – selective agonist that is used for asthma prophylaxis?
- a. Aminophylline
 - b. Cromolyn
 - c. Epinephrine
 - d. Ipratropium
 - e. Salmeterol
81. Which one of the following drugs is most suitable for management of essential tremor in a patient who has pulmonary disease?
- a. Diazepam
 - b. Levodopa
 - c. Metoprolol
 - d. Propranolol
 - e. Terbutaline
82. A drug useful in the treatment of asthma but lacking bronchodilator action, is
- a. Cromolyn
 - b. Ephedrine
 - c. Isoproterenol
 - d. Metaproterenol
 - e. Metoprolol
83. Relative to fexofenadine, diphenhydramine is more likely to
- a. Be used for treatment of asthma
 - b. Be used for treatment of gastroesophageal reflux disease
 - c. Cause cardiac arrhythmias in overdose
 - d. Have efficacy in the prevention of motion sickness
 - e. Increase the serum concentration of warfarin
84. Bacteria that make either a fermentative or respiratory set of enzymes are known as
- a. Obligate anaerobes
 - b. Obligate aerobes
 - c. Microaerophiles
 - d. Facultative organisms
85. The symptoms of allergenmediated asthma result from which of the following?
- a. Increased release of mediators from mast cells
 - b. Increased adrenergic responsiveness of the airways
 - c. Increased vascular permeability of bronchial tissue
 - d. Decreased calcium influx into the mast cell
 - e. Decreased prostaglandin production
86. Acute exacerbations of asthma can be triggered by all of the following except
- a. Bacterial or viral pneumonia
 - b. Hypersensitivity reaction to penicillin
 - c. Discontinuation of asthma medication
 - d. Hot, dry weather
 - e. Stressful emotional events
87. In the emergency department, the preferred firstline therapy for asthma exacerbation is
- a. Theophylline
 - b. A β_2 agonist
 - c. A corticosteroid
 - d. Cromolyn sodium
 - e. An antihistamine
88. Which of the following tests is used at home to assess therapy and determine if a patient with asthma should seek emergency care?
- a. Forced expiratory volume in one second (FEV1)
 - b. Forced vital capacity (FVC)
 - c. Total lung capacity (TLC)
 - d. Peak expiratory flow rate (PEFR)
 - e. Residual volume (RV)
89. Which of the following agents and dosage regimens is the best choice of treatment for an asthma patient with rheumatoid arthritis who is considered sensitive to aspirin (experiences bronchospasm with use)?
- a. Ibuprofen, 800 mg three times daily
 - b. Acetaminophen, 650 mg every 4 hours
 - c. Gold injections, 25 mg intramuscularly once a week
 - d. Azathioprine, 75 mg daily
 - e. Cyclophosphamide, 100 mg daily
90. A drug administered by inhalation of powder as a prophylactic for asthma is
- a. Ephedrine
 - b. Disodium cromolyn
 - c. Isoproterenol
 - d. Oxytriphylline
 - e. Epinephrine
91. Which of the following may precipitate an asthma attack?
- a. Respiratory acidosis
 - b. Viral and bacterial infections
 - c. Respiratory alkalosis
 - d. Cranberry juice
 - e. Chocolate or Coca Cola

92. **Terbutaline has a preference for stimulation of which of the following receptors?**
- Alpha
 - Gamma
 - Beta 1
 - Beta 2
 - Dopaminergic
93. **The National Institutes of Health (NIH) guidelines for the treatment of asthma recommended institution of routine inhaled corticosteroids when patients are classified as having greater than or equal to which type of asthma?**
- Mild intermittent
 - Mild persistent
 - Moderate persistent
 - Severe persistent
94. **Isoxuprine is used to treat**
- Asthma
 - Severe hypotension
 - Nasal congestion
 - Premature labor
 - Hypertension
95. **The most likely complication of prolonged use of nasal decongestant drops is**
- Atrophic rhinitis
 - Hypertrophy of nasal mucosa
 - Nasopharyngeal moniliasis
 - Blockage of Eustachian tubes
96. **Which of the following is a selective H1 receptor agonist ?**
- 4methyl histamine
 - Impromidine
 - 2Thiazolyl ethylamine
 - Mepyramine
97. **Fall in blood pressure caused by larger doses of histamine is blocked by**
- H1 antihistaminics alone
 - H2 ANTAGONISTS alone
 - Combination of H1 and H2 antagonists
 - None of the above
98. **Histamine is involved as a mediator in the following pathological condition**
- Cocaine
 - Dibucaine
 - Lidocaine
 - Procaine
99. **In the emergency department, the preferred firstline therapy for asthma exacerbation is**
- Theophylline
 - A β agonist
 - A corticosteroid
 - Cromolyn sodium
 - An antihistamine
100. **The capacity of an antihistaminic to produce sedation depends on the following except**
- Relative affinity for central versus peripheral H1 receptors
 - Ability to penetrate bloodbrain barrier
 - Individual susceptibility
 - Ratio of H1 : H2 blockade produced by the drug
101. **While prescribing the conventional H1 antihistaminics the patient should be advised to avoid**
- Driving motor vehicles
 - Consuming processed cheese
 - Strenuous physical exertion
 - All of the above
102. **The antihistaminic which has calcium channel blocking and labyrinthine suppressant property is**
- Cyproheptadine
 - Cinnarizine
 - Clemastine
 - Cetirizine
103. **Erythromycin should not be given to patient being treated with terfenadine because**
- Erythromycin induces the metabolism of terfenadine
 - Dangerous ventricular arrhythmias can occur
 - Terfenadine inhibits metabolism of erythromycin
 - Terfenadine antagonizes the antimicrobial action of erythromycin
104. **Select the H1 antihistaminic which is used topically in the nose for allergic rhinitis**
- Deep intraabdominal operation
 - Trachial intubation
 - Tetanus
 - Diagnosis of myasthenia gravis
105. **H1 antihistaminics are beneficial in**
- All types of allergic disorders
 - Certain type I allergic reactions only
 - Anaphylactic shock
 - Bronchial asthma
106. **The action of 5Hydroxy tryptamine mediated by the 5HT3 receptor is**
- Vasoconstriction
 - Bradycardia
 - EDRF release
 - Platelet aggregation
107. **Tachyphylaxis to many actions on repeated injection is a feature of the following autocoid**
- Histamine
 - 5Hydroxytryptamine
 - Bradykinin
 - Angiotensin
108. **The smooth muscle stimulating action of 5HT is most marked in the**
- Bronchi
 - Intestines
 - Ureter
 - Biliary tract
109. **The 5HT antagonist that has antihypertensive property is**
- Methysergide
 - Cyproheptadine
 - Ketanserin
 - Ondansetron

- 1274 110. The most important receptor involved in cytotoxic drug induced vomiting is**
- Histamine H1 receptor
 - Serotonin 5HT₃ receptor
 - Dopamine D2 receptor
 - Opioid μ receptor
- 111. Which of the following expectorants acts both directly on the airway mucosa as well as reflexly ?**
- Potassium iodide
 - Guaiphenesin
 - Terpin hydrate
 - Bromhexine
- 112. Bromhexine acts by**
- Inhibiting cough center
 - Irritating gastric mucosa and reflexly increasing bronchial secretion
 - Depolymerizing mucopolysaccharides present
 - Desensitizing stretch receptors in the lungs
- 113. The primary goals of asthma therapy include all of the following except**
- maintain normal activity levels
 - maintain control of symptoms
 - avoid adverse effects of asthma medications
 - prevent acute exacerbations and chronic symptoms
 - prevent destruction of lung tissue
- 114. Antitussives act by**
- Liquifying bronchial secretions
 - Raising the threshold of cough centre
 - Reducing cough inducing impulses from the lungs
 - Both (b) and (c)
- 115. Which of the following antitussive is present in opium but has no analgesic or addicting properties ?**
- Noscapine
 - Codeine
 - Pholcodeine
 - Ethylmorphine
- 116. Bronchodilators are useful in cough**
- Only when cough is nonproductive
 - Only when cough is associated with thick sticky secretions
 - Only when reflex bronchoconstriction is associated
 - Irrespective of nature of cough or associated features
- 117. The common and dose related side effect of salbutamol is**
- Rise in blood pressure
 - Muscle tremor
 - Hyperglycaemia
 - Central nervous system stimulation
- 118. Which of the following tests is used at home to assess therapy and determine if a patient with asthma should seek emergency care?**
- Forced expiratory volume in one second (FEV₁)
 - Forced vital capacity (FVC)
 - Total lung capacity (TLC)
 - Peak expiratory flow rate (PEFR)
 - Residual volume (RV)
- 119. In a patient of bronchial asthma, inhaled salbutamol produces the following effect(s).**
- Inhibits antigenantibody reaction in the lungs
 - Causes bronchodilatation
 - Reduces bronchial hyperreactivity
 - Both (b) and (c)
- 120. Select the correct statement about salmeterol.**
- It is a long acting selective β_2 agonist bronchodilator
 - It is a bronchodilator with anti-inflammatory property
 - It is a β blocker that can be safely given to asthmatics
 - It is an antihistaminic with mast cells stabilizing property
- 121. Caffeine is more powerful than theophylline in exerting the following action**
- Bronchodilatation
 - Cardiac stimulation
 - Diuresis
 - Augmentation of skeletal muscle contractility
- 122. Methylxanthines exert the following action (s) at cellular/molecular level**
- Intracellular release of Ca²⁺
 - Antagonism of adenosine
 - Inhibition of phosphodiesterase
 - All of the above
- 123. Relatively higher dose of theophylline is required to attain therapeutics plasma concentration in**
- Smokers
 - Congestive heart failure patients
 - Those receiving erythromycin
 - Those receiving cimetidine
- 124. The antiasthma drug which cannot be administered by inhalation is**
- Theophylline
 - Ipratropium bromide
 - Budesonide
 - Terbutaline
- 125. A 10 year old child suffers from exercise induced asthma: Which is the most suitable first line drug for regular prophylactic therapy ?**
- Oral salbutamol
 - Oral theophylline
 - Inhaled sodium cromoglycate
 - Inhaled beclomethasone dipropionate
- 126. Which of the following drugs is neither bronchodilator nor antiinflammatory, but has antihistaminic and mast cell stabilizing activity ?**
- Sodium cromoglycate
 - Ketotifen
 - Beclomethasone dipropionate
 - Mepyramine maleate
- 127. The most consistent, pronounced and sustained relief of symptoms in chronic bronchial asthma is afforded by**
- β_2 sympathomimetics
 - Anticholinergics
 - Sodium cromoglycate
 - Corticosteroids

128. **Intransasal spray of budesonide is indicated in**
- Common cold
 - Acute vasomotor rhinitis
 - Perennial vasomotor rhinitis
 - Epistaxis
129. **In patients of bronchial asthma inhaled corticosteroids achieve the following except**
- Reduce the need for bronchodilator medication
 - Control an attack of refractory asthma
 - Reduce bronchial hyperreactivity
 - Reverse diminished responsiveness to sympathomimetic bronchodilators
130. **Budesonide is a**
- Nonsteroidal anti-inflammatory drug
 - High ceiling diuretic
 - Inhaled corticosteroid for asthma
 - Contraceptive
131. **In an asthma patient treated with systemic corticosteroids, bronchodilator drugs**
- Are not needed
 - Are contraindicated
 - May be used on 'as and when required' basis
 - Are ineffective
132. **To be a useful inhaled glucocorticoid the drug should have**
- High oral bioavailability
 - Low oral bioavailability
 - Additional bronchodilator activity
 - Prodrug character
133. **Histamine**
- May be released from mast cells by a number of therapeutic agents
 - Causes sedation
 - Decreases the force of contraction of ventricular muscle
 - Can cause strong contractions of the gravid human uterus
134. **Chronic Bronchitis is characterized by**
- the destruction of central and peripheral portions of the acinus
 - an increased number of mucous glands and goblet cells
 - edema and inflammation of the bronchioles
- only I is correct
 - only III is correct
 - I and II are correct
 - II and III are correct
 - I, II and III are correct
135. **Smooth muscle relaxation is due to stimulation of which type of histamine receptors**
- H1
 - H2
 - H3
 - All of the above
136. **All the following are employed in inhalation therapy of asthma except**
- Beclomethasone
 - Budesonide
 - Dexamethasone
 - Triamcinolone
137. **Which xanthine derivative has no function in asthma ?**
- Theophylline
 - Pentoxifyllin
 - Enprofyllin
 - None of the above
138. **What is symport ?**
- Counter transport
 - Contransport
 - Carrier mediated diffusion
 - Solvent drug
139. **Pyridostigmine differs from neostigmine in that**
- More potent orally
 - Longer acting
 - Less muscarinic side effects
 - All of the above
140. **The following are recognized features of Pancoast's tumour except:**
- ipsilateral Horner's syndrome
 - wasting of the dorsal interossei
 - pain in the arm radiating to the fourth and fifth fingers
 - erosion of the first rib
 - weakness of abduction at the shoulder
141. **Which of the following is true concerning Whooping cough (pertussis)?**
- is a greater threat to children during the second 6 months of life, after maternal antibody has declined, than during the first 6 months
 - may lead to hemiplegia
 - is characteristically associated with a polymorph leucocytosis
 - is associated with convulsions less frequently than is the case with other febrile conditions
 - rapidly resolves with antibiotic treatment
142. **A 19yearold female developed pleural effusions, ascites and ankle swelling. Her blood pressure was 112/76 mmHg. Investigations revealed: serum alanine transferase 17 U/L (5 15), serum total bilirubin 17 umol/L (1 22), serum albumin 21 g/L (34 94), serum total cholesterol 9.8 mmol/L (<5.2). What is the next most appropriate investigation?**
- Antinuclear antibody
 - Pregnancy test
 - Prothrombin time
 - Serum protein electrophoresis
 - Urinary protein estimation
143. **A 51 year old businessman complains of dyspnoea on exertion. He recently returned from a business trip to the USA. He has distant heart sounds on auscultation of the chest. A chest radiograph reveals that there is a thin rim of calcification surrounding the cardiac outline. Which of the following conditions is most likely responsible for these findings?**
- Uraemia
 - Tuberculosis
 - Group B coxsackie virus
 - Sarcoidosis
 - Metastatic carcinoma

1276 144. A 48-year-old woman presented with shortness of breath, cough with heavy sputum production, and a low grade fever. She has smoked 20 cigarettes per day for 30 years. Her arterial blood gases revealed pH of 7.4, PaCO₂ of 45 and a PaO₂ of 78. What is the most likely diagnosis?

- a. Bronchial asthma
- b. Chronic bronchitis
- c. Cryptogenic fibrosing alveolitis
- d. Paraneoplastic syndrome
- e. Pulmonary embolism

145. A 49-year-old man with a long history of alcoholism presents with cough, haemoptysis and pleuritic chest pain. He has had night sweats and 10 kg weight loss in the last three months. On chest X-ray there is a subtle nodular pattern throughout the lung. He underwent a transbronchial biopsy which showed multinucleated giant cells, epithelioid cells and necrotic debris. Which of the following is the most likely diagnosis?

- a. Aspergillosis
- b. Pneumocystis carinii pneumonia
- c. Small cell carcinoma
- d. Squamous cell carcinoma
- e. Tuberculosis

146. A 55-year-old man who has a 25-year pack history of smoking presents with productive cough with mucoid sputum of 2-year duration. On examination he has scattered ronchi and wheezing. The likeliest diagnosis is:

- a. Bronchial Asthma
- b. Bronchiectasis
- c. Chronic Bronchitis
- d. Pneumonitis
- e. Fibrosing Alveolitis

147. A 67-year-old who is known to suffer from severe chronic bronchitis is admitted from home with an acute exacerbation. Which of the following is true?

- a. An Acidosis with a low bicarbonate would be expected
- b. Extensor plantar responses feature
- c. Gentamicin would be a reasonable initial treatment until cultures are available
- d. Oxygen therapy should aim to increase the pO₂ to above 8 kPa (60 mmHg)
- e. Peripheral oedema indicates coexisting heart failure

148. A 65-year-old woman, has smoked 50 cigarettes a day for 40 years. She has had increasing dyspnoea for the several years, but no cough. A Chest X-ray shows increased lung size along with flattening of the diaphragms, consistent with emphysema. Over the next several years she develops worsening peripheral oedema. Her vital signs show T° 36.7 C, P 80, RR 15, and BP 120/80 mm Hg. Which of the following cardiac findings is most likely to be present?

- a. Mitral valve stenosis
- b. Constrictive pericarditis
- c. Right ventricular hypertrophy
- d. Left ventricular aneurysm
- e. Nonbacterial thrombotic endocarditis

149. A 55-year-old plumber presented with a dry nocturnal cough and increasing exertional breathlessness. On examination he had early finger clubbing, cyanosis and bilateral basal crackles. A chest X-ray showed bilateral lower zone shadowing. Investigations revealed: PaO₂ (breathing air) 8.2 kPa (11.312.6), FEV₁/FVC ratio 85%. Which of the following investigations is most likely to establish the diagnosis?

- a. Echocardiography.

- b. High resolution CT scan of chest
- c. Measurement of diffusion capacity
- d. Serum angiotensin-converting enzyme (ACE) level
- e. Transbronchial lung biopsy

150. A 20-year-old male student is assessed for shortness of breath that occurs whilst running. He has no other symptoms and does not smoke. Examination, full blood count, and chest X-ray are normal. Which of the following is most likely to be helpful in confirming the suspected diagnosis?

- a. Arterial blood gas studies before and after exercise
- b. Determination of lung volumes and diffusing capacity
- c. Measurement of venous blood lactate before and after exercise
- d. Spirometry before and after administration of bronchodilators
- e. Spirometry before and after exercise

151. A 40-year-old worker presents with wheezing and breathlessness which seem to improve over weekends and holiday periods when he is not working. What is he most likely to be exposed to at work?

- a. Platinum salts
- b. Avian bloom
- c. Aspergillus clavatus
- d. Work in the Silver industry
- e. Exposure to spores of Actinomyces

152. The pulmonary vascular system is different from the systemic circulation in that the pulmonary system demonstrates which of the following?

- a. High pressures, high flow rates, highly compliant vessels
- b. High pressures, high flow rates, low compliance vessels
- c. Low pressures, high flow rates, high compliance vessels
- d. Low pressures, low flow rates, high compliance vessels
- e. Low pressures, low flow rates, low compliance vessels

153. A 60-year-old man with ankylosing spondylitis presents with cough, weight loss and tiredness. His CXR shows longstanding upper lobe fibrosis. Three sputum tests stain positive for Acid fast bacilli but are consistently negative for Mycobacterium tuberculosis on culture. Which of the following is the most likely cause?

- a. Mycobacterium avium intracellulare complex
- b. Micropolyspora faeni
- c. Allergic Bronchopulmonary Aspergillosis
- d. Sarcoidosis
- e. Tuberculosis

154. Which of the following is a recognised cause of a phrenic nerve palsy?

- a. Aortic aneurysm
- b. Dermoid
- c. Ganglioneuroma
- d. Pericardial cyst
- e. Sarcoidosis

155. Which of the following statements is true of the pulmonary function test's vital capacity (VC)?

- a. Vital capacity cannot be measured from spirometry alone
- b. Vital capacity is increased in emphysema and reduced in interstitial fibrosis
- c. Vital capacity is the maximal amount of air which can be exhaled after maximal inspiration
- d. Vital capacity is the sum of tidal volume (VT) and inspiratory capacity (IC)

- e. Vital capacity, when reduced, is a specific indication of restrictive lung disease
156. A 24 year old asthmatic female is admitted with acute severe asthma. Which of the following statements regarding the diagnosis is correct?
- Agitation should be managed with a benzodiazepine
 - A high inspired Oxygen concentration should be used routinely
 - Inhaled salmeterol is indicated as first line therapy
 - Normal arterial pCO₂ is reassuring
 - Pulsus paradoxus is a reliable sign of severity
157. Recognised associations. Which of the following is correct?
- pneumoconiosis and clubbing
 - lung carcinoids and pleural effusion
 - pulmonary embolus and left bundle branch block
 - pulmonary fibrosis and hypercapnia
 - bronchopulmonary aspergillosis and wheezing
158. Randomised controlled trials have shown that longterm oxygen therapy (LTOT) reduces mortality in:
- cryptogenic fibrosing alveolitis
 - cor pulmonale due to chronic airflow obstruction
 - asthma
 - cystic fibrosis
 - pulmonary sarcoidosis
159. A 65yearold woman, a heavy smoker for many years, has had worsening dyspnoea for the past 5 years, without a significant cough. A chest Xray shows increased lung size along with flattening of the diaphragms, consistent with emphysema. Over the next several years she develops worsening peripheral oedema. BP 115/70 mmHg. Which of the following cardiac findings is most likely to be present?
- Constrictive pericarditis
 - Left ventricular aneurysm
 - Mitral valve stenosis
 - Nonbacterial thrombotic endocarditis
 - Right ventricular hypertrophy
160. A 45yearold solicitor had an onset of severe, crushing, substernal chest pain while attending a football match. He collapsed on his way to the car. Bystander Cardiorespiratory Resuscitation was begun immediately and continued until arrival in Casualty where an endotracheal tube was inserted and ventilation was maintained on 100% oxygen. Investigations revealed: pH 7.13, PaO₂ 560 mmHg, PaCO₂ 18 mmHg, Bicarbonate 5.8, SaO₂ 98%. Based on these laboratory values, which of the following statements best describes his current pathophysiology?
- He is demonstrating a primary respiratory alkalosis
 - He probably developed a large right to left intracardiac shunt
 - His anion gap is probably normal
 - His oxyhemoglobin curve is shifted to the left
 - His pulmonary artery pressure is probably elevated
161. Obstructive sleep apnoea characteristically associated with:
- hypersomnolence
 - impotence
 - macroglossia
 - insomnia
 - polydipsia
162. A 26yearold man with a history of alcohol and drug abuse was admitted with a 14 day history of fever, cough and fatigue. He was emaciated. His temperature was 39.4°C. Cervical and axillary lymphadenopathy were present. Chest Xray revealed bilateral areas of pulmonary shadowing. Which of the following is the most likely diagnosis?
- alcoholic cardiomyopathy
 - pneumococcal pneumonia
 - pneumocystis pneumonia
 - pulmonary tuberculosis
 - tricuspid endocarditis
163. A 75yearold man with squamous cell carcinoma is thought to have resectable disease. Which of the following would be a contraindication to surgery?
- clubbing
 - FEV₁ of 0.75 L
 - his age of 75 years
 - pleural effusion
 - Syndrome of Inappropriate ADH
164. A 65yearold female presents with a 3 week history of malaise and blood in her sputum. Bronchoscopy reveals a mass in the right main bronchus, and histology demonstrates it to be a small cell carcinoma. Further investigation fails to show any metastases. What is the most appropriate step in management?
- Chemotherapy
 - Endobronchial laser therapy
 - Radiotherapy
 - Surgery
 - Palliative therapy
165. A 41 year old man with a history of nasal congestion, breathlessness, cough and wheeze presents with a left foot drop. Which of the following is the most likely diagnosis?
- Diabetes mellitus
 - Wegeners Granulomatosis
 - Churg Staus Syndrome
 - Pulmonary eosinophilia
 - Polyarteritis Nodosa
166. In asbestos related disorders which of the following statements is correct?
- basal fibrotic shadowing on CXR suggests coincidental idiopathic fibrosing alveolitis
 - increased incidence of primary lung cancer
 - pleural effusion develops more than 20 years after causative asbestos exposure
 - pleural plaques are recognized precursors of mesothelioma
 - the risk of malignant mesothelioma is greatly increased in smokers compared with nonsmokers
167. A 60 year old man was admitted with communityacquired pneumonia and deteriorated over the next few hours. Which one of the following indicates a poor prognosis?
- A total white cell count of $17 \times 10^9/L$ (411)
 - Blood pressure of 110/70 mm Hg
 - Respiratory rate of 35 breaths/min
 - Rigors
 - Temperature of 39°C
168. Which of the following statements concerning industrial lung disorders is correct?
- pneumoconiosis can be diagnosed in the absence of chest Xray abnormalities

- b. occupational asthma occurs more frequently in atopic persons
- c. silo fillers disease is caused by allergy to grain
- d. widespread crepitations are typically heard in extrinsic allergic alveolitis
- e. symptoms occur within minutes if exposure to mouldy hay in Farmer's lung
169. A young child presents with respiratory distress, worsening over 2 days. Blood gases show a pH of 7.25, a PCO₂ of 7.5kPa, a PO₂ of 8.5kPa, and a base excess of 4. Which of the following interpretations is correct?
- a. Results are consistent with bronchopulmonary dysplasia.
- b. Blood gases suggest type 1 respiratory failure.
- c. Immediate intubation is required.
- d. Results are consistent with late severe asthma.
- e. Bicarbonate may be necessary to correct the acidosis.
170. A 19 year old female presents with acute breathlessness. She has had asthma for approximately 3 years and recently commenced new therapy. Which agent may be responsible for this exacerbation?
- a. Salmeterol
- b. Theophylline
- c. Beclomethasone
- d. Ipratropium bromide
- e. Montelukast
171. A 22 year old lady recently returned from a holiday in Malta was admitted with a 3 day history of fever, generalised lymphadenopathy and a macular rash over the trunk and legs. Which of the following is the most likely diagnosis?
- a. Sarcoidosis
- b. Tuberculosis
- c. Familial Mediterranean Fever
- d. Infectious Mononucleosis
- e. Actinomycosis
172. Which of the following is a recognised treatment for complications of cystic fibrosis?
- a. DNAase to assist in reinflating collapsed lung segments.
- b. Rectal pullthrough and anastomosis for rectal prolapse.
- c. Pancreatic transplant for diabetes mellitus.
- d. Nebulised tobramycin for pseudomonas colonisation of the lower respiratory tract.
- e. Hypotonic saline drinks for hypernatraemic dehydration.
173. Which of the following is a typical feature of Farmer's lung?
- a. basal crackles
- b. Eosinophilia
- c. Haemoptysis
- d. Increased pCO₂
- e. Positive serum paraproteins
174. A 28 year old man who had had tuberculosis of the mediastinal lymph nodes diagnosed two weeks previously and who had been started on chemotherapy with rifampicin, isoniazid and pyrazinamide was admitted because of the increasing dyspnoea and stridor. Chest Xray showed compression of both main bronchi by carinal lymph node enlargement. What is the next step in management?
- a. Start prednisolone
- b. Mediastinoscopy and biopsy
- c. Refer for stent insertion/tracheostomy
- d. Refer for urgent CT scan of the mediastinum
- e. The addition of ethambutol
175. A 24 year old male presents after developing a bluish discolouration of the body, lips and nails. He denies any relevant past medical history. Examination reveals a central cyanosis and a grey complexion. Investigation revealed: Haemoglobin 17.0 g/dL (13.018.0), PaO₂ 13.0 kPa (11.312.6)mm SaO₂ (using an oximeter) 85% (>95), What is the most likely diagnosis?
- a. Argyria
- b. Cyanotic congenital heart disease
- c. Haemochromatosis
- d. Methaemoglobinaemia
- e. Methylene blue poisoning
176. Which of the following is true of BCG vaccination?
- a. is contraindicated in neonates
- b. is a killed polysaccharide antigen vaccine
- c. should be given to all children who have a strongly positive tuberculin test
- d. is presently routinely offered in the UK at age 16 years
- e. Provides protection against leprosy
177. Carcinoid tumors of the lung (bronchial adenomas) originate from which of the following cell types?
- a. Ciliated cell
- b. Clara cell
- c. Kulchitsky (K) cell
- d. Mucus (goblet) cell
- e. Type 2 Alveolar cell
178. A 55 year old woman on treatment for longstanding rheumatoid arthritis has recently become dyspnoeic on mild exertion and developed a dry cough. The oxygen saturation was found to be 87% on air. The chest xray showed a diffuse bilateral interstitial infiltrate. An extensive infection screen was negative and her symptoms were felt to be druginduced. Which drug is most likely to have caused this adverse effect?
- a. azathioprine
- b. cyclosporin
- c. hydroxychloroquine
- d. methotrexate
- e. sulphasalazine
179. The following is true about Cystic Fibrosis:
- a. Is an autosomal dominant condition.
- b. Is due to mutation of CFTR gene on chromosome 17
- c. Skin test may be positive for aspergillus
- d. Median survival rate is 10 to 15 years.
- e. Is a cause of mental retardation.
180. A 67yearold man presents with a long history of cough, breathlessness on minimal exertion and ankle swelling. He smokes 3040 cigarettes per day. Investigations are as follows: Haemoglobin 19g/dl, white blood count 7.3, PaO₂ (air) 6.2kPa, PaCO₂ (air) 8.9kPa, serum [H⁺] 44 nmol/l, serum [HCO₃] 36 mmol/l, What is the most likely explanation of these results?
- a. acute respiratory acidosis
- b. chronic respiratory acidosis
- c. chronic respiratory alkalosis
- d. metabolic acidosis
- e. metabolic alkalosis
181. Which of the following statement is true of infections with Mycobacterium tuberculosis:
- a. nonsputum producing patients are noninfectious
- b. a positive tuberculin test indicates active disease

- c. lymph node positive disease requires longer treatment than pulmonary disease
- d. in pregnant women treatment should not be given until after delivery
- e. pyrazinamide has high activity against active extracellular organisms
182. In restrictive lung disease due to respiratory muscle weakness, which of the following statements is true?
- Low FEV1/FVC, high RV/TLC
 - Low FEV1/FVC, normal TLC
 - Low VC, low FEV1, normal TLC, low RV/TLC
 - Low VC, low RV, low TLC
 - Low VC, low TLC, high RV/TLC
183. Which of the following would be the least likely finding in a patient with sarcoidosis?
- Hepatic granulomas
 - Restrictive pulmonary function tests
 - Skin lesions
 - Uveitis
 - X bodies on bronchoalveolar lavage (BAL) fluid
184. A 72yearold lifelong smoker presents with progressive dyspnoea on exertion. He has a chronic, nonproductive cough. On examination he is thin, breathing with pursed lips, respiratory rate 25/min, with mild wheezing on chest auscultation. Investigations show FEV1 0.8 L, FVC 1.6 L, pH 7.35, paCO₂ 45 mmHg, paO₂ 55 mmHg. What is the predominant mechanism of the airflow limitation in this gentleman?
- Bronchospasm
 - Foreign body obstruction
 - Increased airways resistance
 - Loss of elastic recoil
 - Mucus plugging in the small airways
185. Which of the following statements regarding cryptogenic fibrosing alveolitis is correct?
- Active inflammation may be suggested by a CT scan
 - peak flow rate is a good guide to severity
 - 80 per cent of patients inirration
 - Reduced cardiac output
 - Reduced airway resistance
186. A 54year old woman was admitted with acute breathlessness. On examination she had a temperature of 37.9oC, a respiratory rate of 32 breaths per minute, a pulse of 120 beats per minute, a blood pressure of 100/60 mmHg, and a peak expiratory flow rate of 250 litres per minute. Auscultation of the heart and chest was normal. The Chest Xray was normal and blood gases on air showed: pH 7.35 (7.36 7.44), PaO₂ 6.0, kPa (11.3 12.6), PaCO₂ 3.9, kPa (4.7 6.0), Serum bicarbonate 20 mmol/l (20 28). She was started on high flow oxygen. What is the most important next treatment?
- amoxycillin intravenously
 - aminophylline intravenously
 - intravenous fluids
 - low molecular weight heparin
 - nebulised salbutamol
187. A 76yearold with a recent history of cerebral haemorrhage is admitted with a cough, worsening breathlessness and right pleuritic chest pain. He is also mildly pyrexial. His ventilation/perfusion scan reveals several areas of ventilation/perfusion mismatches. What is the most appropriate line of management?
- aspirin therapy
 - antibiotics
 - inferior vena cava filter
 - low molecular weight heparin treatment
 - warfarin treatment
188. Which of the following is a recognised feature of massive pulmonary embolism?
- reduced plasma lactate levels
 - an increase in serum troponin levels
 - an arterial pH less than 7.2
 - blood gases show increased pCO₂ on air
 - normal Ddimer levels
189. Which of the following statements is true of the diffusion capacity of carbon monoxide?
- Is a specific measure of lung perfusion.
 - Depends on the thickness of the alveolar wall.
 - Depends on the surface area available for gas exchange.
 - Is increased in cigarette smokers.
 - Is increased in emphysema.
190. A 19 year old woman became breathless while travelling on an aeroplane. Which one of the following features most strongly supports a diagnosis of acute hyperventilation related to a panic disorder?
- Carpal spasm.
 - Finger paraesthesiae.
 - Hypotension.
 - Lightheadedness.
 - Loss of consciousness
191. A 64 year old man is found to have squamous cell bronchogenic carcinoma. Which of the following statements is true regarding surgical resection?
- An FEV1 of 2 L is a major contraindication to surgical resection.
 - Hypercalcaemia makes further assessment for surgery unnecessary.
 - Is precluded if a CT scan of the thorax shows enlarged mediastinal lymph nodes.
 - Positive sputum cytology excludes the need for bronchoscopic examination of the airways.
 - The presence of finger clubbing indicates that liver metastases are already present.
192. A 60yearold man with breathlessness, fever and headache is suspected of having Farmers Lung. A CXR shows diffuse nodular shadowing predominantly in the mid and lower zones. What would be the most useful diagnostic test?
- Blood Culture
 - Sputum Culture
 - Serum precipitating antibodies to Micropolyspora faeni
 - Serum Precipitating antibodies to Aspergillus clavatus
 - Serum Precipitating antibodies to Cryptostroma corticale
193. A 43 year old asthmatic develops worsening breathlessness and his full blood count has revealed an eosinophilia. Which of the following statements is true with allergic bronchopulmonary aspergillosis that the patient is likely to suffer from?
- The immediate skin test to an extract of aspergillus fumigatus is negative
 - Circulating IgG precipitins to aspergillus fumigatus are positive
 - The CO transfer factor is unaffected

- d. Recurrent haemoptysis is a characteristic feature
e. Pleural effusion is a complication
194. A 35-year-old man presents after 3 months of chronic cough with purulent sputum and shortness of breath on exertion. He gives a history of at least two sinus or bronchial infections per year requiring treatment with antibiotics. He also says he and his wife have been unable to have children. He smokes 15 cigarettes per day. Examination is normal except for some wheezing and an area of focal crackles at the left lung base. Chest Xray shows patchy infiltrates at both bases. Investigations revealed FEV1 2.0 L, FVC 2.7 L, pH 7.38, PaCO₂ 40 mmHg, PaO₂ 82 mmHg. What is the most likely diagnosis?
- alpha1Antitrypsin (Antiprotease) deficiency
 - Asthma
 - Cystic fibrosis
 - Hypogammaglobulinemia
 - Immotile cilia syndrome
195. An 18-year-old attending the A+E department is noted to have central cyanosis. She is perfectly well but was told to go to A+E by her friends who said she looked blue. What is the most likely cause?
- Carbon Monoxide Poisoning
 - Lead Poisoning
 - Drinking water contaminated with nitrates
 - Anorexia Nervosa
 - Severe Anaemia
196. A 59-year-old female smoker is diagnosed with oat cell carcinoma of the bronchus. Which of the following relating to this diagnosis is true?
- The tumour is likely to be radiosensitive
 - occurs with equal frequency in smokers and nonsmokers
 - has a 5-year survival greater than 20%
 - Is associated with the elaboration of ectopic ADH secretion
 - Is typically associated with ectopic parathormone secretion.
197. Which of the following conditions may give a false/positive sweat test?
- Congenital adrenal hyperplasia
 - Hyperthyroidism
 - Hyperparathyroidism
 - Obesity
 - Glucose-6-phosphatase deficiency
198. A 60-year-old man was diagnosed last year with adenocarcinoma of the lung, and a 4 cm mass lesion was treated with a right lower lobectomy. He now has an abdominal CT scan that reveals scattered hepatic mass lesions and hilar lymphadenopathy. For several weeks, he has had increasing malaise. A urinalysis reveals marked proteinuria, and a 24-hour urine protein collection is 2.7 g/24hr. His serum urea is 30 mmol/L (2.5-7.5) with creatinine of 450 µmol/L (60-110). A renal biopsy is performed, and there is focal deposition of IgG and C3 with a granular pattern. He is most likely to have which of the following conditions?
- Goodpasture's syndrome
 - Membranous glomerulonephritis
 - Minimal change glomerulonephritis
 - Nodular glomerulosclerosis
 - Rapidly progressive glomerulonephritis
199. The morphological appearance of *Pneumocystis carinii* infection in the lung is best characterised as which one of the following?
- A bronchopneumonia with abscess formation
 - A haemorrhagic and necrotizing pneumonia
 - An acute respiratory distress syndrome (ARDS) with widespread hyaline membrane formation
 - An interstitial pneumonitis with foamy intra-alveolar exudate
 - An organizing bronchopneumonia
200. Which of the following statements is NOT true of primary pulmonary tuberculosis?
- It is characteristically asymptomatic
 - Miliary spread is commoner in a younger age group
 - The initial immunological response causes hilar lymphadenopathy
 - pleural effusion occurs before tuberculin skin testing is positive
 - A positive tuberculin skin test develops within two weeks of infection
201. In which of the following have randomised controlled trials shown that long-term oxygen therapy (LTOT) reduces mortality?
- Asthma
 - Cor pulmonale due to chronic airflow obstruction
 - Cryptogenic fibrosing alveolitis
 - Cystic fibrosis
 - Pulmonary sarcoidosis
202. Which ONE of the following is true regarding acute pulmonary embolism?
- a normal ECG excludes the diagnosis
 - embolectomy is more effective than thrombolysis in improving survival
 - Heparin is as effective as thrombolytic therapy
 - the presence of hypoxaemia is an indication for thrombolysis
 - thrombolysis administered through a peripheral vein is as effective as through a pulmonary artery catheter
203. A 36-year-old man complains of a persistent cough. A CXR shows fibrosis of both upper lobes. What is the most likely diagnosis?
- Systemic Sclerosis
 - Primary Pulmonary Hypertension
 - Cystic Fibrosis
 - Ankylosing Spondylitis
 - Allergic bronchopulmonary aspergillosis
204. Which one of the following statements is true of chronic obstructive pulmonary disease?
- patients show at least a 15 per cent improvement in the FEV1 after nebulised bronchodilator
 - inhaled corticosteroid usage does not improve long-term prognosis
 - breathlessness is uncommon until the FEV1 falls to approximately 50 per cent of predicted
 - emphysema is associated with increased transfer factor
 - in advanced cases there is reduced pulmonary vascular resistance
205. A 16-year-old boy with cystic fibrosis presents with abdominal pain. Which of the following is most likely to be the cause?
- Ulcerative colitis
 - Irritable Bowel Syndrome
 - Pyelonephritis
 - Meconium Ileus Equivalent Syndrome
 - Renal Calculi

206. A patient's arterial blood gases give the following results; pO₂ 10 kPa (75 mmHg), pCO₂ 7 kPa (52 mmHg), pH 7.47, [HCO₃]⁻ 37. Which of the following is the most likely cause?
- Chronic Hyperventilation Syndrome
 - Acute exacerbation of COPD
 - Several days of Pyloric obstruction
 - Pulmonary Embolism
 - Diabetic Coma
207. A patient with Rheumatoid arthritis complains of progressive breathlessness. Which of the following is the most likely cause?
- Pulmonary Eosinophilia
 - Asthma [0]
 - Pulmonary nodules
 - Fibrosing Alveolitis
 - Pulmonary Embolus
208. In the normal adolescent lung which of the following is correct?
- There is an intrapleural pressure of 30 cmH₂O (3kPa) at the end of normal expiration.
 - There is a resting pulmonary blood flow of 10L/min.
 - The V:Q ratio is greater in apical than basal segments of the lung when upright and at rest.
 - The majority of airway resistance is from large airways.
 - Cartilage is present in all respiratory bronchioles.
209. Sleep Apnoea syndrome is best diagnosed by the following:
- Polygraphic Sleep Studies
 - therapeutic trial of amphetamines
 - EEG
 - Blood gases during apneic episodes
 - Presence of HLADR2 and DQw1
210. A 70yearold man presented with weight loss and haemoptysis. He was a heavy smoker. A chest radiograph showed a mass lesion in the left lung bronchoscopic biopsies confirmed a squamous carcinoma.
- Chest wall invasion by primary tumour
 - An enlarged mediastinal lymph node on CT scanning
 - Forced expiratory volume (FEV₁) of 1.2 litres
 - Hypercalcaemia
 - Malignant pleural effusion
211. Which of the following statements regarding prognosis in lung cancer is true?
- Combined modality therapy (chemotherapy, radiation therapy and surgery) has improved overall lung cancer survival to 40% at 5 years.
 - Overall lung cancer survival is < 15% at 5 years.
 - Patients undergoing radiation therapy have a 5 year survival of 40%.
 - Patients who qualify for surgery have a 50% 5 year survival.
 - With chemotherapy, overall survival in small cell (oat cell) carcinomas has risen to 60% at 5 years.
212. A breathless patient undergoes pulmonary Function testing. The following results are obtained; FEV₁ = 74% predicted, FVC = 68% predicted, TLC = 77% predicted, Tlco = 46% predicted, Kco = 53% predicted. Which of the following is the most likely cause ?
- COPD
 - Asthma
 - Cryptogenic Fibrosing Alveolitis
 - Morbid obesity
 - kyphoscoliosis
213. A lifelong nonsmoker is diagnosed with emphysema. Which of the following would be the most likely aetiological agent ?
- Isocyanates
 - Cadmium Exposure
 - Steel
 - Zinc
 - Asbestos
214. Which cell type is responsible for the early asthmatic response?
- Basophil
 - Eosinophil
 - Mast cell
 - Neutrophil
 - TH1lymphocyte
215. A 43yearold Caribbean female Comprehensive school teacher complains of slowly increasing breathlessness. She has no smoking history. Investigations reveal she has bilateral enlarged hilar lymph nodes, elevated serum calcium, interstitial lung disease, and enlarged liver and spleen. What is the most likely diagnosis?
- Coccidioidomycosis [0]
 - Hyperparathyroidism [0]
 - Hypervitaminosis D [0]
 - Sarcoidosis [100]
 - Tuberculosis [0]
216. A 58yearold man presents with weight loss and haemoptysis. He has smoked most of his life. On examination he is clubbed and has clinical evidence of right pleural effusion. His serum calcium is 3.2mM. Which of the following histological type of lung cancer is he most likely to suffer from?
- mesothelioma
 - small cell carcinoma
 - large cell carcinoma
 - squamous cell carcinoma
 - adenocarcinoma
217. A 68yearold man presents with a onemonth history of dyspnoea and a 3kg weight loss. On examination there were signs of a large left pleural effusion, confirmed on Chest Xray. Investigations revealed: Pleural fluid analysis: Protein 38 g/L, Cytology a few lymphocytes and red blood cells. Which one of the following investigations should be considered next?
- Bronchoscopy.
 - CT scan of thorax.
 - Repeat pleural aspiration with biopsy.
 - Thoracoscopic pleural biopsy.
 - Tuberculin test.
218. A 63yearold woman presents a 5 day history of progressive shortness of breath. Her family brought her in because she was increasingly sleepy during the last 24 hours. She was diagnosed with Chronic Obstructive Pulmonary Disease 3 years ago and has a FEV₁ less than 50% of predicted. She has an oxygen concentrator at home. Examination revealed depressed consciousness and a respiratory rate of 24 with shallow breaths. There were decreased breath sounds with minimal air movement. If an arterial blood gas on room air were to be performed, which of the following results would you expect?
- pH 7.16 paCO₂ 70 paO₂ 50 HCO₃ 24
 - pH 7.24 paCO₂ 80 paO₂ 55 HCO₃ 30

- c. pH 7.32 paCO₂ 60 paO₂ 70 HCO₃ 30
 d. pH 7.41 paCO₂ 40 paO₂ 50 HCO₃ 24
 e. pH 7.48 paCO₂ 30 paO₂ 85 HCO₃ 24
219. A 47 year old woman presenting with breathlessness has arterial blood gases taken which give the following results: pO₂ 8.7 kPa (65mmHg), pCO₂ 4.4 kPa (33mmHg), pH 7.46, [HCO₃]₂₄. Which of the following is the most likely diagnosis.
- Hyperventilation syndrome
 - Acute severe asthma
 - Emphysema
 - Kyphoscoliosis
 - Opiate overdose
220. Which of the following forms of pulmonary embolism is the commonest cause of secondary pulmonary hypertension?
- Air embolism (Caisson's disease)
 - Fat embolism
 - Massive pulmonary embolism (e.g., saddle embolism)
 - Multiple small recurrent pulmonary embolism
 - Paradoxical embolism
221. Primary Pulmonary tuberculosis:
- Leads to pleural effusion
 - Is highly infective
 - Commonly leads to military TB
 - May be totally asymptomatic
 - Usually produces cavitation
222. An elderly man with a history of asthma, congestive heart failure, and peptic ulcer disease is admitted with bronchospasm and rapid atrial fibrillation. He receives frequent nebulised salbutamol and IV digoxin loading, his regular medications are continued. 24 hours after admission his serum potassium is noted to be 2.8 mmol/l. Which of his medications is most likely to have caused this abnormality.
- Digoxin
 - ACE inhibitor
 - Salbutamol
 - Ranitidine
 - Spironolactone
223. The parents of a child with cystic fibrosis consult you wishing to know what is the risk of their next child being a carrier of the condition. Which ONE of the following percentages is the correct risk?
- 0%
 - 25%
 - 50%
 - 75%
 - 100%
224. Most of the cells that fill the alveoli in desquamative interstitial pneumonitis (DIP) are which of the following?
- Eosinophils
 - Lymphocytes
 - Macrophages
 - Neutrophils
 - Plasma cells
225. Which of the following statements regarding the sweat test is true?
- Sweating is enhanced by application of atropine.
 - The filter paper is left on for a total of about 4 hours.
 - At least 25mg of sweat is necessary for a reliable result.
 - More than 60mmol/L of chloride in sweat is diagnostic of cystic fibrosis.
 - False/positive results may be encountered in children with nephrotic syndrome.
226. A 42 year old woman presents with an acute attack of asthma. She is able to speak in short sentences. Her respiratory rate is 28 breaths per minute and the peak expiratory flow rate 120L/min (predicted 480 L/min. What is the most appropriate treatment for this patient?
- Intravenous aminophylline.
 - Intravenous salbutamol
 - Nebulized salbutamol
 - Oral salbutamol
 - Oral theophylline
227. A 15 year old boy presented with wheezing when playing football and nocturnal cough. Which is the best test to confirm the underlying condition?
- A trial of oral corticosteroids
 - A trial of inhaled corticosteroids
 - A trial of inhaled salbutamol
 - Serial peak expiratory flow rate measurements
 - Spirometry alone
228. Which of the following is NOT true with regard to the radiological appearance of a chest Xray?
- Consolidation of the right middle lobe will obliterate the right atrial shadow in the PA view
 - Consolidation of the right apical lobe will extend to the horizontal fissure in the PA view
 - Consolidation of the right anterior segment of the right middle lobe will extend to the right transverse fissure and the right hilum in PA view
 - A consolidation of the lingular lobe will obliterate the aortic knuckle and pulmonary trunk in the PA view
 - A consolidation of the left lower lobe will elevate the left hemidiaphragm
229. Which of the following statements is true of psittacosis (ornithosis):
- It is only a risk from contact with psittacines (parrots), not other birds
 - It usually causes many polymorphs to be present in the sputum
 - It is more of a risk to children than to adults who are exposed to birds
 - It does spread from person to person
 - Infection responds rapidly to penicillin therapy
230. Which of the following statements is true regarding smoking in pregnancy?
- Smoking assists in maturation of the fetal lung.
 - The reduction in birth weight is related to the number of cigarettes smoked per day.
 - Maternal smoking may adversely affect testicular function in male children.
 - Dysmorphic facies is a recognised complication.
 - The newborn baby may require adjustments in drug dosages because of it.

231. A 55 year old man presents with ataxia and bilateral gynecomastia. Which of the following is the most likely diagnosis?
- Klinefelters Syndrome
 - Long term treatment with cyclophosphamide for Wegener's Granulomatosis
 - Long term treatment with oral steroids for chronic asthma
 - Bronchial Carcinoma
 - Hypereosinophilic Syndrome
232. A 45 year old female presents with a 6 month history of exertional dyspnoea and is diagnosed with pulmonary fibrosis. Over the last one year she has received a variety of medications. Which of the following drugs could be responsible?
- Dexamethasone
 - Ibuprofen
 - nalidixic acid
 - penicillamine
 - sulphasalazine
233. Which one of the following is correct regarding longacting beta2 agonists?
- Can be used to prevent activityinduced symptoms without anti-inflammatory therapy.
 - Become less effective over time (tolerance).
 - Are beneficial in acute viral croup.
 - Protect against allergen challenge for up to 48 hours.
 - Should not be used in association with erythromycin.

Pulmonary Medicine - Answers

- | | | | | |
|-------|-------|--------|--------|--------|
| 1. b | 38. d | 75. c | 112. c | 149. b |
| 2. c | 39. c | 76. b | 113. e | 150. e |
| 3. d | 40. a | 77. a | 114. d | 151. a |
| 4. b | 41. c | 78. d | 115. a | 152. d |
| 5. c | 42. a | 79. a | 116. c | 153. a |
| 6. a | 43. c | 80. e | 117. b | 154. a |
| 7. e | 44. b | 81. c | 118. d | 155. c |
| 8. a | 45. a | 82. a | 119. b | 156. b |
| 9. b | 46. d | 83. d | 120. a | 157. e |
| 10. c | 47. b | 84. d | 121. d | 158. b |
| 11. d | 48. d | 85. a | 122. d | 159. e |
| 12. e | 49. b | 86. d | 123. a | 160. e |
| 13. b | 50. b | 87. b | 124. a | 161. a |
| 14. a | 51. d | 88. d | 125. c | 162. c |
| 15. c | 52. a | 89. c | 126. b | 163. b |
| 16. e | 53. a | 90. b | 127. d | 164. a |
| 17. d | 54. b | 91. b | 128. c | 165. c |
| 18. c | 55. a | 92. d | 129. b | 166. c |
| 19. e | 56. c | 93. b | 130. c | 167. c |
| 20. b | 57. d | 94. d | 131. c | 168. b |
| 21. e | 58. d | 95. a | 132. b | 169. d |
| 22. a | 59. c | 96. c | 133. d | 170. a |
| 23. d | 60. d | 97. c | 134. c | 171. d |
| 24. b | 61. a | 98. b | 135. b | 172. d |
| 25. d | 62. a | 99. b | 136. c | 173. a |
| 26. d | 63. d | 100. d | 137. b | 174. a |
| 27. c | 64. c | 101. a | 138. b | 175. d |
| 28. a | 65. c | 102. b | 139. b | 176. e |
| 29. d | 66. a | 103. b | 140. e | 177. c |
| 30. c | 67. c | 104. d | 141. b | 178. d |
| 31. a | 68. a | 105. b | 142. e | 179. c |
| 32. b | 69. a | 106. b | 143. b | 180. b |
| 33. d | 70. a | 107. b | 144. b | 181. a |
| 34. e | 71. d | 108. b | 145. e | 182. e |
| 35. c | 72. e | 109. c | 146. c | 183. e |
| 36. b | 73. a | 110. b | 147. b | 184. d |
| 37. e | 74. c | 111. a | 148. c | 185. a |

186. e	196. d	206. c	216. d	226. c
187. c	197. e	207. d	217. d	227. d
188. b	198. b	208. c	218. b	228. e
189. b	199. d	209. a	219. b	229. d
190. a	200. e	210. e	220. d	230. b
191. c	201. b	211. b	221. d	231. d
192. c	202. e	212. c	222. c	232. e
193. b	203. e	213. b	223. c	233. a
194. e	204. b	214. c	224. c	
195. c	205. d	215. d	225. d	