Paper Code: 10
SUBJECT: Tuberculosis and Respiratory Medicine/Pulmonary Medicine

Duration: 3.00 Hours
Maximum Marks: 180

The candidate fill the Question Paper Booklet No. on Answer Sheet carefully after opening the Paper Seal / Polythene bag. Candidate himself shall be responsible for any error.

INSTRUCTIONS FOR CANDIDATES

1. Answer all questions.
2. All questions carry equal marks.
3. Only one answer is to be given for each question.
4. If more than one answers are marked, it would be treated as wrong answer.
5. Each question has four alternative responses marked serially as 1, 2, 3, 4. You have to darken only one circle or bubble indicating the correct answer on the Answer Sheet using BLUE BALL POINT PEN.
6. The OMR Answer Sheet is inside this Test Booklet. When you are directed to open the Test Booklet, take out the Answer Sheet and fill in the particulars carefully with blue ball point pen only.
7. 1/3 part of the mark(s) of each question will be deducted for each wrong answer. A wrong answer means an incorrect answer or more than one answers for any question. Leaving all the relevant circles or bubbles of any question blank will not be considered as wrong answer.
8. Mobile Phone or any other electronic gadget in the examination hall is strictly prohibited. A candidate found with any of such objectionable material with him/her will be strictly dealt as per rules.
9. Please correctly fill your Roll Number in O.M.R. Sheet. 5 Marks can be deducted for filling wrong or incomplete Roll Number.

Warning: If a candidate is found copying or if any unauthorized material is found in his/her possession, E.I.R. would be lodged against him/her in the Police Station and he/she would liable to be prosecuted. Department may also debar him/her permanently from all future examinations.

Do not open this Test Booklet until you are asked to do so.
1. In space travel which pulmonary function will not be change?
   (1) Vital Capacity
   (2) FRC (Functional Residual Capacity)
   (3) DLCO (Diffusion Lung Capacity)
   (4) FEV 25 – 75%

2. Maximum prevalence of silicosis occurs in:
   (1) Slate pencil workers
   (2) Stone cutters
   (3) Stone grinding
   (4) Ceramic and potteries industry

3. Common complication seen in patient with silicosis are all EXCEPT:
   (1) Tuberculosis
   (2) Scar carcinoma
   (3) Bacterial infections
   (4) Fungal infection

4. Chest X-ray abnormalities in GOLD metal disease will be:
   (1) Small, round opacities
   (2) Reticular/reticulonodular interstitial fibrosis
   (3) Bilateral irregular opacities
   (4) Miliary shadow

5. Asbestos related pulmonary effects will be all EXCEPT:
   (1) Pleural plaques
   (2) Benign pleural effusion
   (3) COPD
   (4) Lung cancer

6. Occupational asthma can be rarely caused by:
   (1) Exposure to animal protein
   (2) Exposure to plant protein
   (3) Exposure to silica particles
   (4) Exposure to grains

7. Major diagnostic criteria among all for hypersensitivity pneumonitis is:
   (1) Basilar crackles
   (2) Decreased diffusion capacity
   (3) Arterial hypoxemia at rest or with exercise
   (4) BAL Lymphocytosis

8. Interstitial Lung disease can be caused by exposure to all EXCEPT:
   (1) Coal dust
   (2) Asbestos
   (3) Crystalizing silica
   (4) Beryllium

9. Rarest among all will cause of drug induced respiratory disease
   (1) Nitrofurantion
   (2) Sulfonamides
   (3) INH, PAS
   (4) Cephalosporins

10. Most common histological subtype of lung cancer associated with superior vena cava syndrome is:
    (1) Small cell carcinoma
    (2) Squamous cell carcinoma
    (3) Adeno carcinoma
    (4) Large cell carcinoma
11. Confirmation of superior vena cava obstruction can be done by
   (1) X-Ray Chest PA
   (2) Bronchoscopy
   (3) C.T. Scan
   (4) Contrast C.T. Scan

12. Commonest Histological subtype of Bronchogenic Carcinoma causes feature of cushing syndrome
   (1) Carcinoid tumour
   (2) Adeno carcinoma
   (3) Small cell carcinoma
   (4) Large cell carcinoma

13. Acromegaly is seen with following common subtype of Bronchogenic Carcinoma
   (1) Carcinoid Syndrome
   (2) Adeno Carcinoma
   (3) Small Cell Carcinoma
   (4) Large Cell Carcinoma

14. Endocrine disorder associated with paraneoplastic syndrome with lung cancer are all EXCEPT :
   (1) SIADH
   (2) Cushing’s syndrome
   (3) Hypothyroidism
   (4) Hypoglycemia

15. Common Middle mediastinum tumours are all EXCEPT :
   (1) Bronchogenic cyst
   (2) Enterogenous cyst
   (3) Lymphangiomas
   (4) Germ cell tumour

16. AHI (apnea-Hypopnea index) is derived from :
   (1) Total number of apnoea and Hypoapnoea divided by total sleep time
   (2) Total number of apnoea & Hypopnea divided by REM sleep time
   (3) Total number of apnoea & Hypoapnoea divided by NREM sleep
   (4) Total number of apnoea divided by total sleep time

17. Uncommon pulmonary complication of progressive systemic sclerosis
   (1) NSIP
   (2) UIP
   (3) Alveolar cell carcinoma
   (4) Pleural effusion

18. All of the following are pulmonary manifestation of SLE EXCEPT :
   (1) Lupus pneumonitis
   (2) Vanishing Lung syndrome
   (3) Pleural effusion
   (4) Progressive pulmonary fibrosis

19. Common clinical features of pulmonary hypertension are EXCEPT :
   (1) Left ventricular heave
   (2) Right ventricular gallop
   (3) Tricuspid regurgitation murmer (systolic)
   (4) Ascites
20. Pulmonary complication of thyroid dysfunction will be:
   (1) Recurrent Pneumonia
   (2) Pneumothorax
   (3) Sleep apnea
   (4) Hilar adenopathy

21. All of the following are pulmonary disorder associated with gastroesophageal reflux EXCEPT:
   (1) Bronchial Asthma
   (2) Idiopathic Pulmonary fibrosis
   (3) Lung abscess
   (4) Mediastinal emphysema

22. Which is not a pulmonary complication of malaria?
   (1) Pulmonary edema
   (2) Pneumonias
   (3) Acute asthma like presentation
   (4) Pneumothorax

23. All of the following can be complication of tuberculosis in pregnancy EXCEPT:
   (1) Spontaneous abortious
   (2) Hydramnios
   (3) Intrauterine death
   (4) Premature labor

24. Systemic feature of COPD include all EXCEPT:
   (1) increase risk of CVS disease
   (2) Depression
   (3) Sleep Apnea
   (4) Cachexia

25. The optimum hrs in long term oxygen therapy is:
   (1) At least 12 hrs daily
   (2) At least 18 hrs daily
   (3) At least 16 hrs daily
   (4) None of the above

26. ECG finding in cor pulmonale include all EXCEPT:
   (1) Right Axis deviation
   (2) R/S amplitude ration in V6<1
   (3) S1Q3T3 pattern
   (4) R/S amplitude ration in V6>1

27. Common indication of heliox therapy include:
   (1) Acute asthma
   (2) Chf. Obstructive pulmonary disease
   (3) Critically ill children
   (4) All of above

28. Which factor causes a shift in Oxygen dissociation curve to left?
   (1) High Po2
   (2) Low PH
   (3) Low Po2
   (4) High temperature

29. All are true with regards to alpha-1 antitrypsin EXCEPT:
   (1) It is a protease inhibitor
   (2) It shows polymorphism
   (3) Deficiency lead of emphysema in lung
   (4) Deficiency is associated with oedema
30. In respiratory acidosis patient will show which of the following features
(1) A low $\text{Pco}_2$
(2) Lowered plasma bicarbonate
(3) Reduced rate and depth of respiration
(4) Decrease the hydrogen ion concentration in Plasma

31. A young man with pulmonary tuberculosis present with massive recurrent haemoptysis. For angiographic treatment with which vascular structure should be evaluated for
(1) A pulmonary artery
(2) Bronchial artery
(3) Pulmonary vein
(4) Superior vena cava

32. A 65 years old man who has been on bed rest for past 15 days complain of chest pain and breathlessness. The chest X-ray is normal, next step investigation should be:
(1) Lung Ventilation perfusion scan
(2) Echocardiography
(3) Pulmonary arteriography
(4) Pulmonary venous wedge angiography

33. A 25 year old man presented with fever, cough, expectoration and breathlessness of 2 month duration. Contrast Enhanced CT of chest shows bilateral upper lobe fibrotic lesion and mediastinum has large necrotic nodes with peripheral rim enhancement. Which one of the following is most probable diagnosis?
(1) Tuberculosis
(2) Sarcoidosis
(3) Lymphoma
(4) Silicosis

34. A cause of homogenous opacity in X-ray is all EXCEPT
(1) Pleural effusion
(2) Diaphragmatic Hernia
(3) Massive consolidation
(4) Emphysema

35. Which is objective sign of identifying Pulmonary plethora in a chest radiography?
(1) Diameter of main pulmonary artery $> 16$ mm
(2) Diameter of left pulmonary artery $> 16$ mm
(3) Diameter of descending right pulmonary artery $> 16$ mm
(4) Diameter of descending left pulmonary artery $> 16$ mm

36. Which of the following causes rib notching on chest radiography?
(1) IVC occlusion
(2) Coarctation of aorta
(3) Bidirectional Glenn shung
(4) Modified Blalock Taussig shung
37. The most definitive method of diagnosis pulmonary embolism
   (1) Pulmonary arteriography
   (2) Radio isotope perfusion pulmonary scintigraphy
   (3) EKG
   (4) Vegography

38. Most diagnostic of pulmonary embolism in a high risk case is:
   (1) Multi detector CT angiography
   (2) Catheter angiography
   (3) D-Dimer
   (4) Ventilation perfusion scan

39. Hamptons hump is seen
   (1) Bronchial carcinoma
   (2) Pneumonia
   (3) Pulmonary embolism
   (4) Hodgkin disease

40. Which of the following features is not seen in ileocaecal tuberculosis?
   (1) Pulled up caecum
   (2) Apple core appearance
   (3) Narrowing of distal end of caecum
   (4) String Sign

41. Obliteration of left heart border in PA chest X-ray is suggestive of:
   (1) Lingular pathology
   (2) Left upper lobe lesion
   (3) Left hilar lymph nodes
   (4) Left lower lobe lesion

42. Cause of a cavitating lesion in the chest radiograph are all EXCEPT:
   (1) Hamartoma
   (2) Squamous carcinoma of the bronchus
   (3) Caplan’s syndrome
   (4) Haematoma

43. Lymphangio myomatosis is characterized by all of the following EXCEPT:
   (1) Post menopausal women
   (2) Recurrent chylous pleural effusions
   (3) Ascites
   (4) Recurrent spontaneous pneumothorax

44. “Golden S” sign is seen in:
   (1) Right upper lobe collapse
   (2) Left upper lobe collapse
   (3) Right middle lobe collapse
   (4) Lower lobe collapse

45. Newborn chest X-ray with respiratory distress shows multiple air containing lesions in left hemithorax and mediastinal shift is suggestive of:
   (1) Neonatal emphysema
   (2) Diaphragmatic hernia
   (3) Pneumatoceles
   (4) Congenital Lung cysts

46. Right lung is seen to best advantage on the following views:
   (1) Right posterior oblique
   (2) Right anterior oblique
   (3) Left anterior oblique
   (4) Lateral
47. A chronic smoker presents with complaints of haemoptysis. Chest X-ray appears to be normal. What is the next best investigation?
   (1) Bronchoscopy
   (2) High resolution CT
   (3) Sputum Cytology
   (4) Bronchoalveolar lavage

48. Multiple punched out lesions on X-ray is seen in:
   (1) Paget’s disease
   (2) Craniopharyngioma
   (3) Multiple myeloma
   (4) Eosinophilic granuloma

49. Which of the following statements regarding auscultation of the chest is TRUE?
   (1) Absence of breath sounds in the hemithorax is almost always associated with a pneumothorax.
   (2) “Cardiac asthma” refers to wheezing associated with alveolar edema in congestive heart failure.
   (3) Rhonchi are a manifestation of obstruction of medium-sized airways.
   (4) The presence of egophony can be used to distinguish pulmonary fibrosis from alveolar filling.

50. A patient is evaluated in the emergency department for peripheral cyanosis. All of the following are potential etiologies EXCEPT:
   (1) Cold exposure
   (2) Deep venous thrombosis
   (3) Methemoglobinemia
   (4) Peripheral vascular disease

51. At what lung volume does the outward recoil of the chest wall equal the inward elastic recoil of the lung?
   (1) Expiration reserve volume
   (2) Functional residual capacity
   (3) Residual volume
   (4) Tidal volume

52. Chronic silicosis is related to an increased risk of which of the following conditions?
   (1) Infection with Mycobacterium tuberculosis
   (2) Lung cancer
   (3) Rheumatoid arthritis
   (4) All of the above

53. All of the following occupational lung disease are correctly matched with their exposure EXCEPT:
   (1) Berylliosis-High-technology electronics
   (2) Byssinosis-Cotton milling
   (3) Farmer’s lung-Moldy hay
   (4) Progressive massive fibrosis-Shipyard workers

54. All of the following conditions are associated with an increased risk of methicillin-resistant Staphylococcus aureus as a cause of health care-associated pneumonia EXCEPT:
   (1) Antibiotic therapy in the preceding 3 months
   (2) Chronic dialysis
   (3) Hospitalization for more than 2 days in the preceding 3 months
   (4) Nursing home residence
55. All of the following factors influence the likelihood of transmitting active tuberculosis EXCEPT:
   (1) Environment in which contact occurs
   (2) Presence of extra pulmonary tuberculosis
   (3) Presence of laryngeal tuberculosis
   (4) Probability of contact with an infectious person

56. All of the following statements regarding interferon-gamma release assays for the diagnosis of latent tuberculosis are true EXCEPT:
   (1) There is no booster phenomenon.
   (2) They are more specific than tuberculin skin testing.
   (3) They have a higher sensitivity than tuberculin skin testing in high HIV-burden areas.
   (4) They may be used to screen for latent tuberculosis in adults working in low prevalence U.S. settings.

57. All of the following statements regarding BCG vaccination are true EXCEPT:
   (1) BCG dissemination may occur in severely immune suppressed patients.
   (2) BCG vaccination is recommended at birth in countries with high TB prevalence.
   (3) BCG vaccination may cause a false-positive tuberculin skin test result.
   (4) BCG vaccine provides protection from TB in HIV infected patients.

58. All of the following respiratory viruses is a cause of the common cold syndrome in children or adults EXCEPT:
   (1) Coronaviruses
   (2) Enteroviruses
   (3) Human respiratory syncytial viruses
   (4) Rhinoviruses

59. Which of the following organisms is unlikely to be found in the sputum of a patient with cystic fibrosis?
   (1) Haemophilus influenza
   (2) Acinetobacter baumannii
   (3) Burkholderia cepacia
   (4) Staphylococcus aureus

60. What would be the expected finding on bronchoalveolar lavage in a patient with diffuse alveolar haemorrhage?
   (1) Ferruginous bodies
   (2) Hemosiderin laden macrophages
   (3) Lymphocytosis with an elevated CD4:CD8 ratio
   (4) Milky appearance with foamy macrophages

61. All the following are pulmonary manifestations of systemic lupus erythematosus EXCEPT:
   (1) Cavitary lung nodules
   (2) Diaphragmatic dysfunction with loss of lung volumes
   (3) Pulmonary hemorrhage
   (4) Pulmonary vascular disease
62. A 62 year old woman is hospitalized following an acute pulmonary embolism. All of the following would typically indicate a massive pulmonary embolism EXCEPT
   (1) Initial presentation with hemoptysis.
   (2) Initial presentation with syncope.
   (3) Presence of right ventricular enlargement on CT scan of the chest.
   (4) Presence of right ventricular hypokinesis on echocardiogram.

63. Patients with chronic hypoventilation disorders often complain of a headache upon wakening. What is the cause of this symptom?
   (1) Arousals from sleep
   (2) Cerebral vasodilation
   (3) Cerebral vasoconstriction
   (4) Polycythemia

64. A 25 year old woman with cystic fibrosis is referred for lung transplantation. She is concerned about her long-term outcomes. Which of the following is the main impediment to long-term survival after lung transplantation?
   (1) Bronchiolitis obliterans syndrome
   (2) Cytomegalovirus infection
   (3) Primary graft dysfunction
   (4) Post-transplant lymphoproliferative disorder

65. All of the following are relative contraindications for the use of succinylcholine as a paralytic for endotracheal intubation EXCEPT:
   (1) Acetaminophen overdose
   (2) Acute renal failure
   (3) Crush injuries
   (4) Muscular dystrophy

66. Which of the following statements regarding the distinction between acute lung injury (ALI) and acute respiratory distress syndrome (ARDS) is true?
   (1) ALI and ARDS can be distinguished by the magnitude of the PaO₂/FiO₂ ratio.
   (2) ALI can be diagnosed in the presence of elevated left atrial pressure, but ARDS can not.
   (3) ALI is caused by direct lung injury, but ARDS is the result of secondary lung injury.
   (4) The risk of ALI but not ARDS increases with multiple predisposing conditions.

67. Which of the following has been demonstrated to reduce mortality in patients with ARDS?
   (1) High-dose glucocorticoids within 48 hours of presentation
   (2) High-frequency mechanical ventilation
   (3) Inhaled nitric oxide
   (4) Low tidal volume mechanical ventilation
68. One of the following is an important key element in the past medical history of a patient in which ABPA is considered as a diagnostic possibility?
(1) History of asthma
(2) History of cystic fibrosis
(3) Immunocompetent host
(4) All of the above

69. Which one of the following hypersensitivity reactions is not associated with the pathogenesis of ABPA?
(1) Type I hypersensitivity
(2) Type II hypersensitivity
(3) Type III hypersensitivity
(4) None of the above

70. Which pulmonary function test finding is most likely to be found in a patient with a diagnosis of ABPA?
(1) Broncho reversibility
(2) Obstructive pattern
(3) Restrictive pattern
(4) Decreased diffusion capacity

71. What percentage of patients with asthma that do not have ABPA have positive Aspergillus skin prick test?
(1) 1-5%
(2) 10-20%
(3) 20-30%
(4) 40-50%

72. Which of the following tests is the most sensitive for monitoring treatment of ABPA?
(1) Total IgE level
(2) Chest CT
(3) Pulmonary function testing
(4) Total peripheral blood eosinophil count

73. Which one of the following represents an advantage of treatment of ABPA with itraconazole?
(1) Steroid sparing effect
(2) Decreased antigenic load
(3) Increased gastric absorption with a high pH
(4) All of the above

74. The predictors of the diagnosis of HP include the following EXCEPT:
(1) Exposure to a known offending allergen
(2) Weight loss
(3) Recurrent episodes of symptoms
(4) Wheezing

75. Acute HP is characterized by which of the following?
(1) Flu like symptoms
(2) Exertional dyspnea
(3) Cyanosis
(4) Weight loss

76. Evaluation of suspected HP includes the following studies EXCEPT:
(1) Chest X-ray
(2) Complete blood count
(3) Serum specific IgE
(4) Serum antibody precipitants
77. In a classic presentation of acute HP, pulmonary function tests demonstrate
   (1) Restriction with low DLCO
   (2) Restriction with high DLCO
   (3) Obstruction with high DLCO
   (4) Restriction and obstruction with normal DLCO

78. The most common cause of agricultural associated Hypersensitivity Pneumonitis (HP) is
   (1) Acinetobacter
   (2) Acinomycetes
   (3) Penicillium
   (4) Cephalosporium

79. Bronchoalveolar lavage from HP (Hypersensitivity Pneumonitis) patients is best characterized by an increase in
   (1) Eosinophils
   (2) Macrophages
   (3) Neutrophils
   (4) Lymphocytes

80. What are the lowest accepted cutoffs for alveolar eosinophilia (obtained on BAL) for Chronic Eosinophilic Pneumonia (CEP)?
   (1) > 10%
   (2) > 25%
   (3) > 40%
   (4) > 75%

81. Which form of eosinophilic pneumonia typically has radiographic evidence of infiltrates with peripheral predominance?
   (1) Acute Eosinophilic Pneumonia (AEP)
   (2) ABPA
   (3) Carcinoma Eosinophilic Pneumonia (CEP)
   (4) Parasitic eosinophilic pneumonia

82. How does Acute Eosinophilic Pneumonia (AEP) differ from Chronic Eosinophilic Pneumonia (CEP) with regard to response to treatment and follow-up?
   (1) Unlike CEP, AEP has a slow response to treatment but rarely recurs
   (2) Unlike CEP, AEP has a slow response to treatment and frequently recurs
   (3) Unlike CEP, AEP has a rapid response to treatment and rarely recurs
   (4) Unlike CP, AEP has a rapid response to treatment but frequently recurs

83. What role do transbrachial biopsies play in the diagnosis of eosinophilic pneumonias?
   (1) They are essential in the diagnosis of eosinophilic pneumonias
   (2) They have replaced the need for a VATS-guided lung biopsy
   (3) They can be used interchangeably with BAL fluid
   (4) They are deemed necessary only in difficult to diagnose cases
84. What is the most common cause of eosinophilic pneumonias world wide?
   (1) Parasitic eosinophilic pneumonias
   (2) ABPA
   (3) Drug-induced eosinophilic pneumonias
   (4) Asthma-associated eosinophilic pneumonias

85. Which of the following are possible causes of spontaneous pneumothorax?
   (1) Ruptured subpleural blebs
   (2) Obstructive lung disease (asthma and COPD)
   (3) Certain pulmonary infections (Pneumocystis pneumonia or Tuberculosis)
   (4) All of the above

86. Which malignancies have been most frequently associated with refractory cases of spontaneous pneumothorax?
   (1) Lymphomas
   (2) Sarcomas
   (3) Bronchogenic carcinomas
   (4) Mesotheliomas

87. Which of the following statements regarding the pathogenesis of mesothelioma is not correct?
   (1) All patients with Malignant Pleural Mesothelioma have a history of asbestos exposure.
   (2) Malignant Pleural Mesothelioma typically develops 20-40 years after asbestos exposure.
   (3) SV40 virus may be involved in the pathogenesis of some Malignant Pleural Mesothelioma cases.
   (4) Familial cases of Malignant Pleural mesothelioma have been identified.

88. Which of the following is an indication to identify the causative organism for a pneumonia?
   (1) Fever greater than 102°F
   (2) Failure of empiric antibiotic coverage
   (3) Purulent sputum production
   (4) Pulse oximetry of 88% on room air

89. Which test result is indicative of Legionella pneumonia?
   (1) Induced sputum showing marked eosinophilia
   (2) Positive urinary antigen testing
   (3) Bronchoalveolar lavage (BAL) fluid showing hemosiderin laden macrophages
   (4) Thoracentesis with fluid analysis showing a cell count of 200 cell/HPF

90. Pneumocystis jiroveci pneumonia is an opportunistic organism that is associated with a defect in what part of the immune system?
   (1) B Cells
   (2) Natural Killer Cells
   (3) Macrophages
   (4) T Cells

91. Which is the greatest risk factor for the progression of Latent Tuberculous Infection (LTBI) to active TB?
   (1) HIV infection
   (2) Diabetes
   (3) Silicosis
   (4) Malnutrition
92. Which of the following medications interacts most frequently with protease inhibitors used to treat HIV infection?
   (1) Ethambutol
   (2) Rifampin
   (3) Isoniazid
   (4) Pyrazinamide

93. Which of the following HIV antiretroviral medications is preferable for use in a patient who is also taking rifampin 600 mg daily?
   (1) Lopinavir
   (2) Atazanavir
   (3) Efavirenz
   (4) None of the above

94. The Immune Reconstitution Inflammatory Syndrome (IRIS) has been reported to occur in HIV-positive patients which of the following?
   (1) Disseminated tuberculosis
   (2) Mycobacterium avium complex lymphadenitis
   (3) Cryptococcal meningitis
   (4) All of the above

95. Which is true about the TST (PPD) and Interferon Gamma Release Assays (IGRAs)?
   (1) TST and IGRAs (QFT-G, QFT-GIT, and T-Spot) should be used as aids in diagnosing infection with MTB
   (2) IGRAs offer enhanced specificity in populations previously vaccinated with BCG
   (3) A negative IGRA as well as negative TST may not be sufficient to exclude a diagnosis of MTB infection
   (4) All of the above statements are true

96. In a patient with symptoms suggestive of asthma, chest radiographs may be useful to display
   (1) Findings consistent with asthma, such as hyperinflation, peribronchial thickening, and mucoid impaction with atelectasis
   (2) Findings suggestive of congenital malformations (e.g., a right aortic arch suggestive of a vascular ring)
   (3) Evidence of airspace disease consistent with aspiration or cystic fibrosis
   (4) All of the above

97. Which of the following is cause of variable extrathoracic airway obstruction?
   (1) Vocal cord polyps
   (2) Paradoxical vocal cord motion
   (3) Tracheomalacia of the intrathoracic airway
   (4) Both (1) and (2)

98. Which of the following is a cause of variable intrathoracic airway obstruction?
   (1) Mediastinal adenopathy
   (2) Paradoxical vocal cord motion
   (3) Vocal cord polyps
   (4) Foreign body
99. Which of the following is true about hypersensitivity pneumonitis?
(1) A low CD4 to CD8 ratio is typically found in a bronchoalveolar lavage
(2) A high CD4 to CD8 ratio is typically found in bronchoalveolar lavage
(3) Oral steroids are not typically used from a treatment standpoint
(4) Antifungal agents are first-line therapy in patients with hypersensitivity pneumonitis

100. Mechanisms for the association of gastroesophageal reflux disease and asthma include:
(1) Aspiration of gastric contents into the lung with consequent bronchospasm
(2) Reflux-induced activation of a vagovagal reflex arc from the esophagus to the lung causing bronchoconstriction
(3) A side effect of proton pump inhibitors
(4) Both (1) and (2)

101. A 65-year-old male with COPD has an FEV₁ of 28% predicted, in addition to the spirometry data, the recently described BODE score provides useful survival prediction data in this type of patient. What additional data are required to calculate the BODE score?
(1) PaO₂, PaCO₂, and 6-min walk test (6MWD)
(2) Arterial pH, dyspnea score, and 6MWD
(3) Dyspnea score, body mass index (BMI), and 6MWD
(4) Arterial pH, BMI, and residual volume

102. The gold standard for the diagnosis of pulmonary hypertension is:
(1) Echocardiography
(2) Physical exam
(3) Right heart catheterization
(4) Pulmonary angiogram

103. The following therapy (ies) should be considered in all patients with pulmonary hypertension regardless of the cause:
(1) Oxygen
(2) Diuretics
(3) Anticoagulation
(4) All of the above

104. Which of the following is not a major risk factor for venous thromboembolism?
(1) Recent major abdominal surgery
(2) Postpartum state
(3) Recent fall
(4) Malignancy

105. The two most helpful diagnosis test in the evaluation of pulmonary embolism are:
(1) CT chest arteriography and 2D echocardiography
(2) Pulmonary arteriogram and venous ultrasonography
(3) Ventilation-perfusion scan and venous ultrasonography
(4) D-dimer and CT chest arteriography
106. Plasma exchange therapy should be considered in which of the following scenarios:
   (1) Wegener granulomatosis with rapidly progressive glomerulonephritis
   (2) Microscopic polyangiitis with diffuse alveolar hemorrhage
   (3) Anti-GBM antibody disease, Goodpasture syndrome
   (4) All of the above

107. Granulomas may be seen on pathologic biopsy specimens in all of the following, EXCEPT:
   (1) Wegener granulomatosis
   (2) Microscopic polyangiitis
   (3) Drug-induced lung toxicity
   (4) Churg-Strauss

108. Patients that present with symptoms of DPLD at age less than 40 years are likely to be any of the following, EXCEPT:
   (1) Pulmonary Langerhans cell histiocytosis
   (2) Sarcoidosis
   (3) Lymphangioleiomyomatosis
   (4) Pneumoconiosis

109. Which of the following does not have a familial component?
   (1) Tuberous sclerosis
   (2) Gaucher’s disease
   (3) Sarcoidosis
   (4) Acute eosinophilic pneumonia

110. Sarcoidosis is associated with all of the following, EXCEPT:
   (1) Extra pulmonary manifestations
   (2) Lymphadenopathy
   (3) Clubbing
   (4) Diffuse parenchymal infiltrates

111. Typical presentation for idiopathic pulmonary fibrosis is:
   (1) Men less than 40 years of age with a subacute or chronic onset
   (2) Men over 40 years of age with an acute or subacute onset
   (3) Men less than 40 years of age with a subacute or chronic onset
   (4) Men over 40 years of age with a subacute or chronic onset

112. Which of the following is not considered an idiopathic cause of DPLD?
   (1) Idiopathic pulmonary fibrosis
   (2) Hypersensitivity pneumonitis
   (3) Tuberous sclerosis
   (4) Amyloidosis

113. Which of the following warrants treatment in patient of sarcoidosis?
   (1) Asymptomatic patient with hilar adenopathy (Stage I)
   (2) Patient with bilateral hilar adenopathy and infiltration (Stage II) and symptoms (cough, dyspnea, chest pain, and effort intolerance)
   (3) Patient with Stage II who is asymptomatic and have only mild lung function impairment
   (4) Patient with Stage II who are asymptomatic with severe lung function
114. Which of the following organism is a usual cause of granuloma formation?
   (1) Leishmania
   (2) Cryptococcus neoformans
   (3) Mycobacterium tuberculosis
   (4) All of the above

115. All of the statements regarding Sarcoidosis is true EXCEPT:
   (1) Sarcoidosis is a common, multi system granulomatous disease of unknown cause
   (2) There is no absolute cure in Sarcoidosis
   (3) Uveitis is uncommon in Sarcoidosis
   (4) Erythema nodosum is common in Sarcoidosis

116. Which of the statement regarding sarcoidosis is correct?
   (1) Overall CNS involvement may be seen in 30% of the patients with Sarcoidosis
   (2) Eye involvement in Sarcoidosis is up to 2%
   (3) Stage IV disease with extensive fibrosis and bullae formation are good responder to corticosteroids
   (4) Hilar adenopathy is unilateral in Tuberculosis and bilateral in Sarcoidosis

117. Which one of the following is not a rapid grower?
   (1) M. Avium complex
   (2) M. Fortuitum
   (3) M. Chelonae
   (4) M. Abscessus

118. Which aminoglycoside is preferred in patients with Nocardia?
   (1) Tobramycin
   (2) Amikacin
   (3) Gentamicin
   (4) Kanamycin

119. A patient with blood chemistry of pH 7.3, CO₂ of 60 and HCO₃ of 28 mEq/dl are indicative of:
   (1) Partially compensated respiratory acidosis
   (2) Uncompensated respiratory acidosis
   (3) Fully compensated respiratory alkalosis
   (4) Metabolic alkalosis with respiratory alkalosis

120. Following pulmonary changes are seen in restrictive lung disease EXCEPT:
   (1) ↑FEV₁/FVC
   (2) ↓TLC
   (3) ↓RV
   (4) ↑VC
121. All are decreased in infiltrative lung disease, EXCEPT:
(1) Vital capacity
(2) Alveolar arterial difference in PaO₂
(3) Total Lung capacity
(4) Lung compliance

122. Alveolar hypoventilation is observed in:
(1) Gillian-Barre syndrome
(2) Acute asthma
(3) Bronchiectasis
(4) CREST syndrome

123. Which one of the following values is not a feature of Acute severe asthma?
(1) Pulsus Paradoxus
(2) PaO₂ of less than 8 kPa
(3) Heart rate of more than 110/min
(4) PEF of 60 to 70% of expected

124. The following are main diagnostic criteria for allergic bronchopulmonary
aspergillosis EXCEPT:
(1) Distal bronchiectasis
(2) Peripheral eosinophilia
(3) Bronchial asthma
(4) Pulmonary infiltrates

125. All are true about Aspirin sensitive asthma EXCEPT:
(1) Nasal polyposis
(2) Treatment with inhaled corticosteroids
(3) Rhinosinusitis
(4) Increased prostaglandins

126. Central bronchiectasis is seen with
(1) Cystic adenomatoid malformation
(2) Cystic fibrosis
(3) Broncho carcinoma
(4) Tuberculosis

127. ABPA complicates:
(1) Cystic fibrosis
(2) TB cavity
(3) Bronchiectasis
(4) Pneumoconiosis

128. In bronchial asthma following pulmonary function abnormalities are present EXCEPT:
(1) Decreased FEV1
(2) Decreased maximum expiratory flow rate
(3) Increased residual volume
(4) Increased inspiratory capacity

129. Consider the following statements:
The features of severe asthma include
(A) Central cyanosis
(B) Disturbance of consciousness
(C) Pulsus paradoxus
(D) Heart rate less than 60/minute
Which of these statements are correct?
(1) (B), (C) and (D)
(2) (A), (C) and (D)
(3) (A), (B) and (C)
(4) (A), (B) and (D)
130. All of the following diseases are associated with peripheral blood eosinophilia EXCEPT:
   (1) Allergic Bronchopulmonary Aspergillus (ABPA)
   (2) Loeffer’s Syndrome
   (3) Pulmonary eosinophilic granuloma
   (4) Churg-Strauss syndrome

131. Commonly used route of administration of omalizumab in asthma is:
   (1) Subcutaneous
   (2) Inhalational
   (3) Intradermal
   (4) Intramuscular

132. Bronchial asthma patient on artificial ventilation requires:
   (1) A low inspiratory flow
   (2) An equal IE ratio of 1:1
   (3) An inverse ration ventilation
   (4) An IE ratio 1:2:5

133. Central bronchiectasis is seen with
   (1) Cystic Adenomatoid Malformation
   (2) Cystic fibrosis
   (3) Broncho carcinoma
   (4) Tuberculosis

134. Emphysema presents with all EXCEPT:
   (1) Cyanosis
   (2) Barrel shaped chest
   (3) Associated with smoking
   (4) Type I respiratory failure

135. The drug varenicline is used in:
   (1) Pulmonary Hemosiderosis
   (2) Sleep apnoea
   (3) Anti-trypsin deficiency
   (4) Nicotine dependence

136. Chronic Cor pulmonale is seen in all EXCEPT:
   (1) Massive pulmonary embolization
   (2) COPD
   (3) Cystic fibrosis
   (4) Primary pulmonary hypertension

137. Most common cause of lung abscess in comatose patient
   (1) Staph aureus
   (2) Oral anaerobes
   (3) Klebsiella
   (4) Tuberculosis

138. Which of the following is most likely to be associated with bronchiectasis of the main bronchi?
   (1) Allergic bronchopulmonary aspergillosis
   (2) Endobronchial tuberculosis
   (3) Measles
   (4) Chronic bronchitis

139. Most likely precursor to bronchiectasis is:
   (1) Tuberculosis
   (2) Carcinoma
   (3) Bronchial adenoma
   (4) Necrotising pneumonia
140. Ultrastructural abnormalities reported in immotile cilia syndrome are:
   (1) Dynein arm deficiency
   (2) Absence of radial spokes
   (3) Absence of central microtubule
   (4) All of the above

141. Not a CT finding in bronchiectasis
   (1) Tree in bud appearance
   (2) Crazy paving appearance
   (3) Signet ring appearance
   (4) Traction bronchiectasis with lung fibrosis

142. Most common presentation in cystic fibrosis:
   (1) Lung infections
   (2) Meconium ileus
   (3) Malabsorption
   (4) Infertility

143. An infant has a positive newborn screening test for cystic fibrosis. What cut off of sweat chloride confirms cystic fibrosis?
   (1) Sweat Chloride > 30 meq/dL
   (2) Sweat Chloride > 40 meq/dL
   (3) Sweat Chloride > 50 meq/dL
   (4) Sweat Chloride > 60 meq/dL

144. Which one of the following is not likely to be associated with pulmonary fibrosis?
   (1) Coal Miner’s Lung
   (2) Primary biliary cirrhosis
   (3) Asbestosis
   (4) Ankylosing spondylitis

145. Conglomerate nodule are found in
   (1) Pulmonary Lymphangioleio-myo-matosis
   (2) Round pneumonia
   (3) Silicosis
   (4) Hypersensitivity pneumonitis

146. Klebsiella pneumonia has the following characteristics EXCEPT:
   (1) Upper lobes are frequently involved
   (2) Pneumatocele may occur commonly
   (3) Empyema is much more common
   (4) Lung abscess formation is very uncommon

147. CURB 65 criteria includes all EXCEPT:
   (1) Age more than or equal to 65 years
   (2) Respiratory rate more than 30/min
   (3) Systolic blood pressure is more than 90 mmhg
   (4) BUN level is more than >7 mmol/L
148. All of the following features are seen in the viral pneumonia EXCEPT:
   (1) Presence of interstitial inflammation
   (2) Predominance of alveolar exudates
   (3) Bronchiolitis
   (4) Multinucleate giant cells in the bronchiolar wall

149. All of the following statements about pneumocystis jiroveci are true EXCEPT:
   (1) Usually associated with CMV infection
   (2) May be associated with pneumatocele
   (3) Usually diagnosed by sputum examination
   (4) Causes disease only in the immunocompromised host

150. Patient diagnosed with HIV and Tuberculosis. How to start ATT and c-A.R.T.?
   (1) Start ATT first
   (2) Start cART first
   (3) Start both simultaneously
   (4) Start cART only

151. False-negative tuberculin test is seen in all EXCEPT:
   (1) After 4-6 weeks of measles attack
   (2) Immunodeficiency state
   (3) Miliary tuberculosis
   (4) Atypical mycobacterial infection

152. All of the following criteria are required for diagnosis of obesity hypoventilation syndrome EXCEPT:
   (1) Hypertension
   (2) Sleep disorder breathing
   (3) BMI ≥ 30 kg/m²
   (4) PaCO₂ ≥ 45 mmHg

153. 40 year old smoker, obese, hypertension patient is having loud snoring. On sleep study patient had > 5 episodes of apnea per hour of sleep at night. After control of BP and quitting smoking what is the next best management for improvement of symptoms of the patient?
   (1) CPAP
   (2) Uvulopalatoplasty
   (3) Weight reduction and diet control
   (4) Mandibular reposition surgery

154. ARDS includes all EXCEPT:
   (1) Hypoxia
   (2) Hypercapnia
   (3) Non-cardiogenic pulmonary edema
   (4) Normal P.C.W.P.

155. The following are features of adult respiratory distress syndrome EXCEPT:
   (1) Hypoxia
   (2) Hypocapnia
   (3) Low protein pulmonary edema
   (4) Stiff lungs
156. Common symptom of Obstructive sleep apnea (OSA) EXCEPT:
   (1) Heavy Snoring
   (2) Witnessed Apnoea
   (3) Daytime Sleepiness
   (4) Chest Pain

157. Associated Disease with OSA EXCEPT:
   (1) Hypertension
   (2) Stroke
   (3) Hypothyroidism
   (4) Congenital Heart disease

158. Prevalence of OSA with sex distribution is true
   (1) Male suffers more than female
   (2) Female suffers more than male
   (3) Male and female prevalence is equal
   (4) Not clearly defined

159. Best Modality for treatment of OSA
   (1) Oral appliances
   (2) Surgical treatment
   (3) Continuous positive airway pressure treatment
   (4) Weight reduction

160. “Velcro Crackels in IPF of heard in:
   (1) End inspiration
   (2) Mid inspiration
   (3) Early inspiration
   (4) End expiration

161. Median survival of IPF is about:
   (1) One years
   (2) Two years
   (3) Four years
   (4) Six years

162. Drugs known to cause interstitial Lung disease are all EXCEPT:
   (1) Gold
   (2) Methotrexate
   (3) Ethambutol
   (4) Rifampicin

163. In Rheumatoid associated ILD surgical Lung biopsy show more common pattern of
   (1) Non specific interstitial
   (2) Usual Interstitial (UIP)
   (3) Organizing Pneumonia
   (4) Lymphocytic Interstitial Pneumonia (LIP)

164. In drugs induced ILD conventional pattern on Histopathology will be all EXCEPT:
   (1) Hypersensitivity Pneumonia
   (2) Non specific interstitial Pneumonia
   (3) Usual Interstitial Pneumonia
   (4) Lymphocytic Interstitial Pneumonia
165. Major diagnostic criteria for IPF include all EXCEPT:
(1) Exclusion of other known cause of ILD
(2) Abnormal pulmonary function
(3) Bibasilar reticular abnormalities on HRCT & No feature to support alternative diagnosis with TBLB/BAL
(4) Bibasilar inspiratory crackles ("Velcro" type)

166. Which of the following associations correctly pairs clinical scenarios and community-acquired pneumonia (CAP) pathogens?
(1) Aspiration pneumonia: Streptococcus pyogenes
(2) Heavy alcohol use: atypical pathogens and staphylococcus aureus
(3) Poor dental hygiene: Chlamydia pneumoniae, Klebsiella pneumoniae
(4) Structural lung disease: Pseudomonas aeruginosa, S. aureus

167. Which of the following conditions would be expected to increase the residual volume (RV) of the Lung?
(1) Bacterial pneumonia
(2) Cryptogenic organizing pneumonia
(3) Emphysema
(4) Obesity

168. The most common cause of a pleural effusion is
(1) Cirrhosis
(2) Left ventricular failure
(3) Malignancy
(4) Hypoproteinemria

169. A 25 year old woman has a moderately severe pulmonary embolism while on oral contraceptive pills. Which of the following is the most likely predisposing factor?
(1) Abnormal factor V
(2) Abnormal protein C
(3) Diminished protein C level
(4) Diminished protein S level

170. In the first year after lung transplant, which of the following is the most common cause of mortality?
(1) Acute rejection
(2) Bronchiolitis obliterans
(3) Infection
(4) Primary graft failure

171. Which of the following is the most common underlying medical condition of patients undergoing lung transplantation?
(1) Chronic obstructive pulmonary disease (COPD)
(2) Cystic fibrosis
(3) Idiopathic pulmonary fibrosis (IPF)
(4) Pulmonary hypertension
172. Second hand tobacco smoke has been associated with which of the following?
   (1) Increased risk of lung cancer
   (2) Increased prevalence of respiratory illness
   (3) Excess cardiac mortality
   (4) All of the above

173. Which of the following represents a rare but serious extrapulmonary complication of influenza infection?
   (1) Diffuse eczematous rash
   (2) Myositis
   (3) Oligoarthritis
   (4) Secondary bacterial pneumonia caused by Staphylococcus aureus

174. Chest radiographic finding sarcoidosis stage 3 is:
   (1) Bilateral hilar adenopathy, often with right paratracheal adenopathy
   (2) Pulmonary infiltrate without adenopathy
   (3) Stage 1+ Pulmonary infiltrate
   (4) Advanced Parenchymal Lung disease like fibrosis, honley, combing, cyst, bullal etc.

175. In Sarcoidosis hyper calcemia has been reported to occur in between:
   (1) 2% to 63% of patients
   (2) 90% of patients
   (3) 1 to 80% of patients
   (4) Almost in all patients

176. Kveim test in sarcoidosis will be interpreted in:
   (1) 2 wks
   (2) 3 wks
   (3) 4 – 6 wks
   (4) At 72 hrs.

177. All drug can cause eosinophilic lung disease EXCEPT:
   (1) PAS
   (2) Sulphonamides
   (3) Methotrexate
   (4) Amidarone

178. Exposure to nitrogen dioxide (NO₂) can lead to all EXCEPT:
   (1) Exacerbation of Asthma
   (2) Increased susceptibility to respiratory infection
   (3) Airway inflammation
   (4) Idiopathic pulmonary fibrosis

179. Short term exposure to outdoor air pollution can cause all EXCEPT:
   (1) Work absenteeism
   (2) Acute respiratory symptom
   (3) Physiologic changes in lung function
   (4) Incidence of Asthma and COPD

180. Preexisting Lung disease can be affected at high altitude EXCEPT:
   (1) COPD
   (2) Breast asthma
   (3) Interstitial Lung disease
   (4) Bronchogenic Carcinoma