

Government Medical College and Hospital Sector 32, Chandigarh

Post: Senior Resident Pulmonary, Critical Care and Sleep Medicine

QUESTION BOOKLET

Time: 120 Minutes

Number of Question: 100

Maximum Marks: 100

Name of Candidate

Roll Number: In figure

In Words

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Signature of the Candidate: _____

DO NOT OPEN THE SEAL ON THE BOOKLET UNTIL ASKED TO DO SO

INSTRUCTIONS:-

1. Write your Roll Number on the Question Booklet and also on the OMR Sheet in the space provided. You will be required to give your thumb impression on the OMR sheet in the space provided.
2. This question booklet contains 100 MCQ's. Once you are permitted to open the Question Booklet, please check for any missing question / misprint etc. and in case of any discrepancy, inform the Assistant Superintendent / Invigilator within 10 minutes of the start of the test.
3. Each question has four alternative answer (A, B, C, D) out of which only one is correct. For each question, **darken only one bubble (A or B or C or D)**, whichever you think is the correct answer, on the OMR Answer sheet **with Black or Blue Ball Pen only**. Do not use any other Pen / Gel pen / Pencil etc. **Do not Tick \checkmark or \times on the OMR Sheet**. Darken the bubbles in the OMR Answer Sheet according to the Serial No. of the Questions given in the Question Booklet.
4. Each MCQ is of One (01) mark. There is no negative marking.
5. If you do not want to answer a question, leave all the bubbles corresponding to that question blank in the OMR Answer sheet.
6. The OMR Answer sheet is designed for computer evaluation. Therefore, if you do not follow the instructions given, it may make evaluation by the computer difficult. Any resultant loss to the candidates on the above account, i.e. not following instructions completely and properly, shall be the responsibility of the candidates only.
7. After the test, handover the Question Booklet and OMR sheet to the Invigilator on duty.
8. A Candidate who creates disturbance of any kind or changes his/her seat or is found in possession of any paper or the any assistance or found giving or receiving assistance or found using any other unfair means during the examination will be expelled from the examination by the Centre superintendent/Observer whose decision shall be final.
9. Telecommunication equipment such as pager, cellular phone, wireless, scanner, smart watch/ watch etc. is not permitted inside the examination hall. Use of calculators is not allowed.
10. Candidate should ensure accuracy of their personal details on the OMR Sheet i.e. Name and Roll No. as well as thumb impression. The personal details are to be filled in by the candidates with his/her own hand writing.

1. NIV failure prediction is done by which of the following scoring system?
 - A. ROX score
 - B. HACOR score
 - C. Modified ROX index.
 - D. Early warning score
2. A 40 year old pigeon breeder and a bidi smoker presents with 2 month history of shortness of breath and low grade fever. His HRCT showed centrilobular nodules in all the lobes with few areas of air trapping. His blood count is within normal limits and his sputum is negative for acid fast bacilli. The most likely diagnosis is
 - A. Tuberculosis
 - B. Hypersensitivity pneumonitis
 - C. Lung cancer with metastasis
 - D. Community acquired pneumonia
3. What is the driving pressure in mechanical ventilation?
 - A. Ppeak-Pplateau
 - B. Ppeak-PEEP
 - C. Pplateau-PEEP
 - D. Paw-Pplateau
4. The emergence of central apneas during CPAP titration for treatment of OSA is called as
 - A. Mixed sleep apnea
 - B. Complex sleep apnea
 - C. Idiopathic central sleep apnea
 - D. Central hypoventilation sleep apnea
5. A 35-year-old male went for a lung cancer screening program, he is a heavy smoker with smoking index more than 200. He underwent CT scan of thorax where a solid nodule of size 7mm is noted. What is the next line of management?
 - A. PET scan
 - B. Biopsy of the nodule
 - C. Repeat CT scan at 3 months
 - D. Repeat CT scan at 6 months
6. A 56-year-old male is diagnosed to have lung cancer and presents to the emergency with anorexia, nausea, vomiting, constipation, polyuria and polydipsia. On investigation he is found to have a serum calcium of 13.5 mg/dl, serum sodium – 141 meq/l, serum potassium – 3.7 meq/l. his renal function is normal. The most common histopathology in this patient is likely to be
 - A. Squamous cell carcinoma
 - B. Small cell carcinoma
 - C. Adenocarcinoma
 - D. Bronchial carcinoid
7. Serum dsDNA auto-antibody is most specific for the disease
 - A. Scleroderma
 - B. Systemic lupus erythematosus
 - C. Sjogren's syndrome
 - D. Rheumatoid arthritis
8. All of the following are the side effects of CPAP therapy, except
 - A. Nasal congestion
 - B. Difficulty inhaling
 - C. Claustrophobia
 - D. Aerophagia
9. Bronchoscopes can be disinfected by:
 - A. 2% glutaraldehyde
 - B. 10% peracetic acid
 - C. 25% glutaraldehyde
 - D. All of the above
10. Mediastinal lymph node station not accessible by EBUS is
 - A. 2R
 - B. 4R
 - C. 10R
 - D. 8

11. The form of chemotherapy commonly used for the management of locally advanced non-small cell lung cancer is called as
 - A. Adjuvant chemotherapy
 - B. Concurrent chemotherapy
 - C. Palliative chemotherapy
 - D. Neo-adjuvant chemotherapy
12. According to latest guidelines, choice for tuberculosis preventive therapy for multi-drug resistant TB patients include
 - A. 6 months of Levofloxacin
 - B. 4 months of linezolid
 - C. 6 months of Bedaquiline
 - D. 4 months of pyrazinamide
13. In the Prevent = Detect = Treat = Build Approach of NSP 2017 -2025, 'Build' pillar includes all the following points, except.
 - A. Community engagement
 - B. Inter-ministerial and corporate sector engagement
 - C. Integrated health system approach
 - D. Free TB drugs for all TB cases
14. Typical CSF findings in a case of tubercular meningitis include
 - A. Proteins >100 mg/dl, 100 - 500 cells/ μ l, glucose <40% of the blood glucose level
 - B. Proteins <10 mg/dl, < 10 cells/ μ l, glucose <40% of the blood glucose level
 - C. Proteins >100 mg/dl, >5000 cells/ μ l, glucose <20% of the blood glucose level
 - D. Proteins <10 mg/dl, <100 cells/ μ l, glucose same as blood glucose level
15. All of the following are risk factors for developing pulmonary NTM infection except:
 - A. Advance age
 - B. Female sex
 - C. Obesity
 - D. Scoliosis
16. Which of the following virus has dsDNA genome?
 - A. Influenza virus
 - B. Corona virus
 - C. Adenovirus
 - D. Respiratory syncytial virus
17. Bronchial hyper-responsiveness is defined as the inhaled concentration of the broncho provocative agent that reduces FEV₁ by ?
 - A. 10%
 - B. 15%
 - C. 20%
 - D. 25%
18. Alpha-1 antitrypsin is mainly produced in ?
 - A. Lungs
 - B. Liver
 - C. Kidney
 - D. Adrenals
19. According to latest GOLD guidelines, what is the cut off value of blood eosinophilia that will indicate stepping up the treatment to triple combination therapy with ICS in a COPD patient with frequent exacerbations?
 - A. $\geq 400/\mu$ l
 - B. $\geq 200/\mu$ l
 - C. $\geq 300/\mu$ l
 - D. Any value of eosinophilia
20. World's asthma day is celebrated on _____ ?
 - A. First Wednesday of November
 - B. First Tuesday of November
 - C. First Wednesday of May
 - D. First Tuesday of May
21. Correct statement about Farmer's lung is
 - A. It is caused by moldy hay containing spores of thermophilic actinomycetes
 - B. It is a type of hypersensitivity pneumonitis
 - C. Avoidance from the causative agent is the first line of treatment
 - D. All the above
22. Correct statement about bronchopulmonary sequestration includes
 - A. Bronchopulmonary sequestraion are more common in the left lung
 - B. Intralobar pulmonary sequestration has its own visceral pleural lining
 - C. Extra-lobar pulmonary sequestration are more common than intra-lobar sequestration
 - D. Surgical excision is the preferred treatment of symptomatic pulmonary sequestration

23. In lymph node station nomenclature, _____ lymph nodes are called as station 6 lymph nodes
- Subaortic lymph nodes
 - Paratracheal lymph nodes
 - Para-aortic lymph nodes
 - Subcarinal lymph nodes
24. Lower zone predominance on CXR is usually seen in all except
- Asbestosis
 - idiopathic NSIP
 - Sarcoidosis
 - IPF
25. The principle of mechanical ventilation in COPD exacerbation includes all of the following except,
- Permissive hypercarbia
 - Shorter exhalation time
 - Maintain arterial oxygen saturation b/w 90-94%.
 - Adequate PEEP to break the Auto PEEP
26. The most important stimulus controlling the level of resting ventilation is:
- PO₂ on peripheral chemoreceptors.
 - pH of CSF on central chemoreceptors
 - pH on peripheral chemoreceptors.
 - PCO₂ on peripheral chemoreceptors
27. Type of nodules seen on HRCT thorax in military tuberculosis are
- Random
 - Perilymphatic
 - Centrilobular
 - None of the above
28. A patient on Anti-TB drugs (RHZE) for fresh pulmonary tuberculosis (Rifampicin resistance not detected on CBNAAT) remains positive at the end of intensive phase. The possible reason/s for positive AFB smear can be
- Dead bacilli
 - Isoniazid resistance
 - Poor drug compliance
 - All the above
29. Amphoric breathing can heard on auscultation in all of the following pathologies, except
- Cavity communicating with the bronchus
 - large pneumothorax with bronchopleural fistula
 - Large closed cavity
 - Hydropneumothorax with bronchopleural fistula
30. Out of 5 R's in smoking cessation programs, R stands for all except
- Restrains
 - Roadblocks
 - Rewards
 - Risks
31. Which of the following statements about sarcoidosis is false
- Chest radiograph in stage 2 of sarcoidosis shows mediastinal lymphadenopathy and parenchymal lung disease
 - Löfgren syndrome consists of erythema nodosum, bilateral hilar lymphadenopathy and polyarthralgias.
 - Steroids are the first choice of treatment in asymptomatic stage I of sarcoidosis
 - Biopsy may be avoided in sarcoidosis with classical clinic-radiological presentation
32. All these cells can act as antigen presenting cells (APC) EXCEPT.
- Macrophages
 - Dendritic cells
 - B lymphocytes
 - Neutrophils
33. The movement of gases in the terminal airways upto the alveoli during quiet inspiration is brought by
- Simple gaseous diffusion
 - Cardiogenic mixing
 - Convective flow
 - All the above

34. A 25-year-old male patient came in emergency with altered sensorium. On ABG PaCO₂ is 68 mm Hg, PaO₂ is 50 mm Hg, and A-aO₂ gradient is normal. These findings are most consistent with
- A shunt
 - A high VA/Q ratio
 - A diffusion impairment
 - Hypoventilation
35. The correct order of proportion in which carbon dioxide is transported in blood is
- Bicarbonate > carbamate > Dissolved CO₂
 - Dissolved CO₂ > Bicarbonate > Carbamate
 - Carbamate > Bicarbonate > Dissolved CO₂
 - Bicarbonate > Dissolved CO₂ > Carbamate
36. Reverse bat wing appearance on CXR is seen in?
- Chronic eosinophilic pneumonia
 - Cardiogenic pulmonary edema
 - Pneumoconiosis
 - Pneumocystis pneumonia
37. The base of the upright human lung compared with the apex has a
- Higher PO₂
 - Higher ventilation.
 - Higher blood flow
 - None of the above
38. Hamman's sign is positive in which condition
- Pneumothorax
 - Pneumo-mediastinum
 - Pleural effusion
 - Lung mass
39. The following are the causes of rightward shift of the oxy-haemoglobin dissociation curve except:
- Acidosis
 - Increased PCO₂
 - Decreased temperature
 - Increased 2,3 DPG
40. With regards of CO₂ transport in the body, all of the following are true except:
- CO₂ is transported in blood in three forms – as bicarbonate, dissolved CO₂ and carbamino compounds
 - CO₂ is 24 times more soluble in blood than oxygen
 - 90 % of CO₂ is transported in the dissolved form and 5% as bicarbonate
 - Oxygen decreases the affinity of hemoglobin for carbon dioxide thereby increasing carbon dioxide delivery in the lung
41. With regards to pulmonary circulation the following are true except:
- The normal pressures in the pulmonary circulation are 25 mm Hg systolic, 8 mm Hg diastolic and 15 mm Hg mean
 - A mean arterial pressure equal to or above 20 mm Hg is defined as pulmonary hypertension
 - According to the 3-zone model of pulmonary blood flow, the arterial pressure exceeds the alveolar pressure in zone I
 - The major site of vasoconstriction during hypoxia is the small pulmonary arteries
42. With reference to compliance of the lungs the following are true except:
- Compliance is defined as the change in volume per unit change in pressure
 - The lungs have more compliance during inhalation than during exhalation
 - Compliance of the lungs is increased in COPD
 - Lungs with more elastance have less compliance
43. With regards to lung volumes and capacities the following are true except:
- The inspiratory reserve volume is the maximum amount of air that can be inspired over and above the tidal volume
 - Functional Residual Capacity = Reserve Volume + Expiratory Reserve Volume
 - Vital Capacity = Tidal Volume + Inspiratory Reserve Volume
 - Residual Volume is the amount of air that is left in the lungs after a maximum expiration

44. The following are true regarding physiological changes during pregnancy except:
- The Functional Residual Capacity decreases by 20 to 30% during term
 - Progesterone is a respiratory stimulant and increases the minute ventilation
 - Fetal Hemoglobin shifts the oxygen hemoglobin dissociation curve to the right
 - There is maximum increase in cardiac output during the second stage of labour
45. With reference to dead space which of the following statement is true?
- The amount of air in the conducting airways is called the physiologic dead space
 - The anatomic dead space is measured using the fowlers method
 - Normal physiologic dead space is around 150 ml
 - The anatomic dead space increases in tracheostomy
46. With reference to oxygen transport, all of the following are true except:
- Most of oxygen is transported in a hemoglobin bound form
 - The oxygen hemoglobin dissociation curve is sigmoid due to cooperative binding
 - The shift in the dissociation curve produced by changes in PCO₂ and pH is called Bohr effect
 - The P₅₀ for human blood is 20 mm Hg
47. With reference to high altitude physiology, all of the following statements are true except:
- Acute exposure to hypoxia leads to hypoxic ventilatory response and acidosis
 - The VO₂ max decreases by 10% for every 1000 m of altitude gain
 - Changes in sleep architecture lead to periodic breathing and central sleep apnoea
 - Hypoxic pulmonary vasoconstriction increases pulmonary vascular resistance
48. In a patient of dyspnoea the following factors contribute to the increased output from the respiratory centres except:
- V/Q mismatch
 - Increase in dead space
 - Stimulation of pulmonary and chest wall receptors
 - Metabolic alkalosis
49. M. tuberculosis complex includes all of the following species except?
- M. tuberculosis
 - M. bovis
 - M. africanum
 - M. xenopi
50. Poncet's disease refers to?
- Polyarthritis in disseminated tuberculosis
 - Anterior uveitis in disseminated tuberculosis
 - Posterior uveitis in disseminated tuberculosis
 - Meningitis in disseminated tuberculosis
51. Rasmussen's aneurysm refers to?
- Aortic aneurysm secondary to tuberculosis
 - Pulmonary artery aneurysm secondary to tuberculosis
 - Bronchial artery aneurysm secondary to tuberculosis
 - Dilatation of a major bronchus
52. Which one of the following is a rapid grower mycobacteria?
- M. scrofulaceum
 - M. kansasii
 - M. fortuitum
 - M. avium intracellulare
53. The anti-tubercular drug having maximum potential for causing psychotic symptoms
- Cycloserine
 - Fluoroquinolones
 - Linezolid
 - Ethionamide

54. If a patient on Bedaquiline containing regimen comes for routine follow up and His ECG shows QTcF of 480-500, what will be your next line of action?
- Do nothing
 - Hospitalise the patient
 - Stop ATT and call after one week
 - Check for any electrolyte abnormalities and correct them
55. What will be the treatment duration of a patient with extra pulmonary H mono drug resistant tuberculosis?
- 6 months
 - 8 months
 - 9 months
 - Will decide to extend further at 7months
56. A 30 weeks pregnant female diagnosed with Drug resistant pulmonary tuberculosis. How will you proceed further
- Advise her termination of pregnancy
 - Wait for her delivery and then start ATT
 - Can start DRTB regimen safely
 - Start DRTB regimen except ethionamide
57. The correct Shorter drug regimen for treatment of drug resistant TB is
- (5) Bdq (6m), Lfx, Cfz, Z, E, Hh, Eto / (4-6) Lfx, Cfz, Z, E
 - (4-6) Bdq (6m), Lfx, Cfz, Hh, Eto / (5) Lfx, Cfz
 - (4-6) Bdq (6m), Lfx, Cfz, Z, E, Hh, Eto / (5) Lfx, Cfz, Z, E
 - (4-6) Bdq, Lfx, Cfz, Z, E, Hh, Eto / (5) Bqd, Lfx, Cfz, Z, E
58. Which of the following drugs belong to Group C of antitubercular agents?
- Linezolid
 - Clofazimine
 - Moxifloxacin
 - Delamanid
59. How many tablets are available in one bottle of Bedaquiline (100mg) ?
- 188
 - 198
 - 185
 - 195
60. Bacteriological reversion means
- At least two consecutive cultures or smears taken on two different occasions, 7 days apart come positive after initial conversion
 - At least two consecutive cultures or smears taken on two different occasions, 7 days apart come negative after 3months of treatment
 - Sputum smear or culture negative at the end of the treatment duration
 - Sputum smear positivity grade decreased after initiation phase of ATT
61. Whole lung lavage is a therapeutic intervention used for
- Pulmonary Alveolar Proteinosis
 - Idiopathic Pulmonary fibrosis
 - Hypersensitivity pneumonitis
 - None of the above
62. Gefitinib acts against
- EGFR receptors
 - ALK receptors
 - Muscarinic receptors
 - Nicotinic receptors
63. Passage of larvae of helminth parasites through lungs causes
- Lofgren syndrome
 - Loeffler syndrome
 - Heerfordt's syndrome
 - None of the above
64. Eosinophilic granulomatosis with polyangiitis is a term used for
- Churg Strauss Syndrome
 - Wegner's granulomatosis
 - C)Tropical pulmonary eosinophilia
 - None of the above
65. Which of these can lead to ILD
- Nitrofurantoin
 - Minocycline
 - Amiodarone
 - All of the above

66. Lower lung zone involvement is most commonly seen in
 A. Silicosis
 B. Idiopathic pulmonary fibrosis
 C. Coal worker pneumoconiosis
 D. All of the above
67. Auto-antibody Scl70 is highly specific for
 A. Scleroderma
 B. Polymyositis
 C. Dermatomyositis
 D. Hypersensitivity Pneumonitis
68. Return of progressively blood lavage specimens during bronchoscopy is suggestive of
 A. Diffuse alveolar haemorrhage
 B. Bacterial pneumonia
 C. Tuberculosis
 D. Sarcoidosis
69. In polysomnography, Apnea-hypopnea index between 5-15 is
 A. Mild OSA
 B. Moderate OSA
 C. Severe OSA
 D. Very Severe OSA
70. Sporadic Lymphangiomyomatosis is caused by somatic mutations of
 A. Tuberous sclerosis complex gene (TSC2)
 B. Tyrosine kinase gene
 C. RAS gene
 D. ALK gene
71. Chronic mountain sickness seen in high-Altitude resident of the Andes is called as
 A. Monge's disease
 B. Albert's disease
 C. Alport's syndrome
 D. None of the above.
72. Bulging fissure sign on X-ray chest is seen in
 A. Mycoplasma pneumonia
 B. Klebsiella pneumonia
 C. Staphylococcal pneumonia
 D. Fungal pneumonia
73. Hyponatremia is seen in
 A. Legionella pneumonia
 B. Streptococcal pneumonia
 C. Staphylococcal pneumonia
 D. None of the above
74. Redman syndrome is caused by:
 A. Vancomycin
 B. Rifampicin
 C. Linezolid
 D. Clofazimine
75. Which of the following electrolyte disturbance is common with Amphotericin B therapy?
 A. Hyperkalemia
 B. Hypokalemia
 C. Hypermagnesimism
 D. None of the above
76. In which of the following condition is normal A-a PO₂ gradient seen?
 A. Hypoventilation disorders
 B. V/Q mismatch disorders
 C. Both of the above
 D. None of the above
77. What is the principle used in pulse oximetry?
 A. Bohr's Law
 B. Lambert-Beer Law
 C. Charles's Law
 D. Joule's Law
78. Stage three in Scadding staging system of chest X-rays in sarcoidosis stands for
 A. Pulmonary infiltrates without hilar adenopathy
 B. pulmonary infiltrates with hilar adenopathy
 C. hilar adenopathy
 D. None of the above
79. Indications for treatment of sarcoidosis include
 A. Threatened organ failure
 B. Symptomatic myopathy
 C. Painful lymphadenopathy
 D. All of the above

80. NSIP pattern on HRCT thorax is seen in
 A. Rheumatoid lung
 B. Polymyositis- dermatomyositis
 C. Mixed connective tissue
 D. All of the above
81. Necrobiotic nodules are seen in
 A. Polymyositis
 B. Rheumatoid arthritis
 C. Radiation pneumonitis
 D. All of the above
82. Which of the following are anaerobic bacteria?
 A. Peptostreptococcus
 B. Bacteroides
 C. Fusobacterium
 D. All of the above
83. Ambrisentan drug used in the treatment for pulmonary hypertension acts on the
 A. Endothelin receptors
 B. PDE4 receptors
 C. PDE5 receptors
 D. Muscarinic receptors
84. Indications for putting Intercostal tube in pleural effusion is
 A. pH greater than 7.3
 B. Pleural fluid culture negative
 C. Frank pus in pleural space
 D. pleural fluid glucose greater than 40 mg/dl
85. The toxic metabolites of oxygen are
 A. Superoxide radical
 B. Hydrogen peroxide
 C. Hydroxyl radical
 D. All of the above
86. Which of the following is false regarding acute eosinophilic pneumonia?
 A. More common in men
 B. Occurs only in nonsmokers
 C. Presents as an acute illness
 D. None of the above
87. RASS score of +2 for assessment of sedation in ICU patients means that the patient is
 A. Agitated
 B. Calm and conscious
 C. Deeply sedated
 D. Sedated but arousable
88. Lines at lung bases oriented parallel to diaphragm as seen on X-ray chest are
 A. Kerley A lines
 B. Kerley B lines
 C. Kerley C lines
 D. None of the above
89. A very fast doubling time of less than one month is characteristic of
 A. Infectious/inflammatory nodules
 B. Hamartoma
 C. Granuloma
 D. None of the above
90. Tomorrow trial use to assess efficacy of
 A. Nintedanib
 B. Pirfenidone
 C. Erlotinib
 D. Gefitinib
91. Acid fastness of M. tuberculosis bacterium is due to high content of?
 A. Phenolic acids in cell wall
 B. Mycolic acids in cell wall
 C. Tyrosine in cell wall
 D. Glucosamine in cell wall
92. Revised National Tuberculosis Control Program started as a pilot project in India in?
 A. 1990
 B. 1993
 C. 1995
 D. 1998

93. Caseous necrosis of involved tissues is the result of?
- Fusion between phagosomes and lysosomes
 - Recruitment of immature monocyte-derived macrophages
 - Macrophage-activating response
 - Tissue damaging response
94. All of the following fulfil one of the components of Virchow's triad for venous thrombosis, except.
- Estrogen therapy
 - Heparin-induced thrombocytopenia
 - Inflammatory bowel disease
 - Physical exercise
95. Which of the following criteria included in The Wells' Criteria for Pulmonary Embolism Prediction has the least score
- DVT symptoms/signs
 - Heart rate >100
 - Malignancy
 - Immobilization/surgery previous 4 wk
96. Which of the following factors predict favourable response to inhaled corticosteroids in COPD?
- Increased sputum neutrophil level >50%
 - Blood neutrophilia >80%
 - Blood eosinophil >300 cells/ul
 - Increased BAL lymphocytosis
97. All of the following drug therapies prevent COPD exacerbation, except
- Inhaled corticosteroids added to dual bronchodilator
 - Dual bronchodilator LABA + LAMA
 - LAMA
 - Theophylline
98. All of following therapeutic options have mortality benefit in COPD except.
- LAMA
 - Pulmonary rehabilitation
 - Triple therapy (ICS+LAMA+LABA)
 - Smoking cessation
99. Which of the following is the indication for long term oxygen therapy in COPD?
- $\text{PaO}_2 < 55 \text{ mmHg}$ at room air
 - $\text{PaO}_2 < 65 \text{ mmHg}$ at room air
 - $\text{PaCO}_2 > 40 \text{ mmHg}$ at room air
 - $\text{PaCO}_2 > 50 \text{ mmHg}$ at room air
100. Which of the following interventions is not useful for the management of advanced heterogenous emphysema with positive collateral ventilation?
- Lung volume reduction surgery
 - Endobronchial valves
 - Vapour ablation
 - Lung volume reduction coil

SUBJECT PULMONARY AND CRITICAL CARE MED SR KEY

1	B	21	D	41	C
2	B	22	D	42	B
3	C	23	C	43	C
4	B	24	C	44	C
5	C	25	B	45	B
6	A	26	B	46	D
7	B	27	A	47	A
8	B	28	D	48	D
9	A	29	C	49	D
10	D	30	A	50	A
11	B	31	C	51	B
12	A	32	D	52	C
13	D	33	D	53	A
14	A	34	D	54	D
15	C	35	A	55	C
16	C	36	A	56	D
17	C	37	C	57	C
18	B	38	B	58	D
19	C	39	C	59	A
20	D	40	C	60	A
61	A	81	B		
62	A	82	D		
63	B	83	A		
64	A	84	C		
65	D	85	D		
66	B	86	B		
67	A	87	A		
68	A	88	B		
69	A	89	A		
70	A	90	A		
71	A	91	B		
72	B	92	B		
73	A	93	D		
74	A	94	D		
75	B	95	C		
76	A	96	C		
77	B	97	D		
78	A	98	A		
79	D	99	A		
80	D	100	B		