

----REVISED----

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

Total points = 125 (90% = 112)

Comments and Post Hoc revisions to the scoring:

After reviewing your responses and the item analysis we made some adjustments in the scoring, reflected above and explained below.

8. (re shunt across a VSD). The simple (intended) answer was to estimate a 20% shunt (from A-a difference of ~400 on 100% O₂), thus 1/5 of the cardiac output or 1000

ml/min. Some of you looked more closely than we did and noted that up to 5% shunt might be of normal sources, so the *VSD flow* would be 750 ml/min. We gave credit for both.

10, 11 We created a bit of a conflict here. #10 (normal TLC would be most likely) listed 4 clear causes of restrictive defects and acute asthma, the correct answer which most of you got. The intended answer for #11 was that an acute asthma attack would have low FEV1/FVC, low FVC and high TLC vs low ratio with normal FVC and normal TLC. In fact (though it is usually not measured during an acute attack), TLC can be normal or increased, while RV is uniformly increased and FVC decreased, but not as much as FEV1. But it did not seem fair to ask you to choose a different TLC response on successive questions, so we gave credit for both of these answers to #11.

13. (uses of chest CT) The point here is that the *diagnosis* of lung cancer is made by histology of a biopsy, not by radiographic appearance. CT is very useful for locating suspect lesions and staging the extent of disease, but we do not tell someone they have cancer until the pathologist says so. However, the great majority of you did not make this distinction, so we gave credit for all responses (essentially throwing the question out).

17. (re mitral stenosis) We were surprised by the responses here. 63% chose a normal diffusing capacity rather than a normal (ie, not elevated) LVEDP. I don't think we said much about this during class, but due to the interstitial and alveolar edema that these patients may have, and the vascular remodeling that occurs over time, the diffusing capacity is typically low. (Test taking hint: when 4/5 of the responses deal with vascular pressures, the answer is likely to be a vascular pressure.) (Test writing hint: responses should all be of the same category.) We let this one stand.

21 (re goal of PEEP) We were also surprised by this response. The importance of oxygen transport (improving it or maintaining it at a lower FIO₂) was the point of Patient 15 at our last conference session. We let this one stand.

24. (re further desaturation with exercise at high altitude). Only 20% of you were brave enough to choose diffusion limitation after we told you repeatedly that it was unlikely in our clinical examples. I thought Dr. Hornbein made the point in his lecture that in contrast to the situation at sea level, diffusion is much slower at high altitude (initial driving pressure from alveolus to blood about 35-20 vs 100-40) so that diffusion limitation does cause PaO₂ to drop when transit time decreases with exercise. We gave credit for all responses.

59-62, These questions again hung on the meaning of *establish the diagnosis* (as opposed to suspecting it). 91% of you recognized that this smoker met the definition of chronic bronchitis, but while he may well have COPD leading to Pulmonary Htn and Cor Pulmonale, he would need spirometry to demonstrate airflow obstruction (the O in COPD). If we had emphasized the word establish (as above) we could hold your feet to the fire, but since we did not, we have given credit for either T/F on 60, 61, 62.