**Question 1**

The major site of airways resistance is:

Select one:

a. Terminal bronchioles

b. Alveolar ducts

c. Medium sized bronchi

d. Trachea

Answer C. Ganong 23rd Edition pg 594 “smooth muscle in the bronchial walls”

**Question 2**

Vital capacity in an average sized male is equal to:

Select one:

a. 3600 ml (approx)

b. Functional residual capacity plus inspiratory capacity

c. Total lung capacity minus residual volume

d. Tidal volume plus inspiratory reserve volume

Answer C. Ganong 23rd Edition pg 593 figure 35-7

**Question 3**

Increased lung compliance is associated with:

Select one:

a. High expanding pressures

b. Interstitial fibrosis

c. Increasing pulmonary venous pressure

d. Increasing age

Answer D.

**Question 4**

Which of the following does NOT assist inspiration?

Select one:

a. The scalene muscles

b. The diaphragm

c. The external intercostal muscles

d. The internal intercostal muscles

Answer D. Ganong 23rd Edition pg 594 “expiratory muscles…internal intercostals”

**Question 5**

Anatomical dead space:

Select one:

a. Is first to be expired at the start of expiration

b. Is greater than physiological dead space in health

c. Is usually involved in gas exchange

d. Is about 250 mls normally

Answer A. Ganong 23rd Edition pg 599 “the first 150 ml expired…”

**Question 6**

Regarding lung volume:

Select one:

a. Residual volume is less than tidal volume

b. The FRC is the air left in the lungs after a forced expiration

c. The vital capacity is greater than the FRC in man

d. Total lung capacity is normally about 9 litres in healthy men

Answer C. Ganong 23rd Edition pg 593 figure 35-7

**Question 7**

Regarding surfactant, which statement is INCORRECT?

Select one:

a. It is increased by long term 100 % oxygen therapy

b. It consists predominantly of phospholipid

c. Hydrophobic “tails” face into the alveolar lumen

d. Pulmonary oedema is a consequence of its absence

Answer A Ganong 23rd Edition pg 598 “surfactant deficiency…long term inhalation of 100% oxygen”

**Question 8**

The approximate amount of air left in the lungs after maximal forced expiration is:

Select one:

a. 0 L

b. 1.1 L

c. 0.1 L

d. 3.1 L

Answer B. Ganong 23rd Edition pg 593 figure 35-7

**Question 9**

Pulmonary compliance:

Select one:

a. Is defined as the change in pressure per unit change in volume

b. Is decreased in emphysema

c. Is independent of lung volume

d. Compliance is slightly greater when measured during deflation than when measured during inflation

Answer D. Ganong 23rd Edition pg 595 “slightly greater when measured during deflation”

**Question 10**

Which is correct regarding alveolar cells?

Select one:

a. Type two pneumocytes are membranous

b. Apud (neuroendocrine) cells are of muscle origin

c. Type one pneumocytes repair alveolar epithelium

d. Pulmonary alveolar macrophages are derived from megakaryocytes

Answer C. Ganong 23rd Edition pg 590 “important in alveolar repair”