8/10

QUIZ 8

E 1. Inhalation/inspiration occurs as a result of
A. An upward movement of the diaphragm
B. Movement of the ribs closer together due to contraction of the inspiratory/inhalatory intercostal muscles
C C. A downward movement of the diaphragm
D. Both A and B
E. Both B and C

E 2. During hypoventilation
A. A person's rate and depth of ventilation is dramatically increased
B. The person's levels of blood CO2 increase
C. The person's levels of blood H+ ions increase; blood pH decreases
D. Both A and C
E. Both B and C

D 3. Hyperventilation
A. Results in respiratory alkalosis
B. Results in respiratory acidosis
C. Lowers blood PCO2
D. Both A and C
E. Both B and C

B 4. During an unforced exhalation/expiration, all of the following are true *except*
A. Alveolar pressure is greater than atmospheric pressure
B. Intrapleural pressure is greater than alveolar pressure
C. Transpulmonary pressure decreases
D. The diaphragm relaxes
E. Lung volume decreases

D 5. The skeletal muscles involved in producing the contractions related to inspiration are stimulated by motor impulses originating from
A. The ventral respiratory group of the medulla oblongata
B. The Pre-Botzinger complex
C C. The dorsal respiratory group of the medulla oblongata
D. Pneumotaxic center of the pons
E. Apneustic center of the pons

E 6. Which of the following statements regarding the transport of CO_2 in blood is true?
A. Some of the CO_2 in blood is dissolved in plasma
B. Some of the CO_2 in blood is dissolved in the cytosol of erythrocytes
C. Some of the CO_2 in blood is bound to hemoglobin
D. Most of the CO_2 in blood is converted to another molecule
E. All of the these statements are true

C 7. Hyperventilation results in
A. Increased alveolar PCO_2 and decreased alveolar PO_2
B. Increased alveolar PCO_2 and PO_2
C. Decreased alveolar PCO_2 and increased alveolar PO_2
D. Decreased alveolar PCO_2 and PO_2
E. No change in alveolar PCO_2 gas concentrations

D 8. Hemoglobin
A. Has a higher affinity for H^+ when in the deoxy state
B. Increases the oxygen-carrying capacity of blood
C. Has a higher affinity for oxygen during exercise due to increased temperature and decreased pH
D. Both A and B
E. Both B and C

B 9. Carbonic anhydrase catalyzes the chemical combination of
A. H_2O and O_2
B. H_2O and CO_2
C. H_2O and CO
D. H^+ and HCO_3^-
E. None of these choices

B 10. Asthma is caused by
A. Loss of alveoli
B. Inflammation of the bronchioles
C. Elevation of intrapleural pressure to equal atmospheric pressure
D. Both A and B
E. Both A and C