Respiratory Quiz

1. The exchange of gases between blood and cells is called
   a. pulmonary ventilation
   b. internal respiration
   c. external respiration
   d. cellular respiration

2. The nose serves all the following functions EXCEPT:
   a. as the initiator of the cough reflex
   b. warming and humidifying the air
   c. cleansing the air
   d. as a passageway for air movement

3. Surface tension of the alveolar fluid is reduced by the presence of
   a. mucus
   b. sebum
   c. surfactant
   d. water

4. When the diaphragm and external intercostals muscles contract, which of the following actions does NOT occur?
   a. air moves into the lung
   b. the intrapleural pressure increases
   c. the diaphragm moves inferiorly
   d. the intrapulmonary pressure decreases

5. When we inhale
   a. alveolar pressure decreases and intrapleural pressure increases
   b. both alveolar pressure and intrapleural pressure increase
   c. both alveolar pressure and intrapleural pressure decrease
   d. alveolar pressure increases and intrapleural pressure decreases
6. Which of the body systems listed below cooperate to supply $O_2$ to cells and eliminate $CO_2$?

   1) digestive system
   2) cardiovascular system
   3) urinary system
   4) respiratory system
   5) endocrine system

   a. 3, 5  
   b. 2, 4  
   c. 1, 2  
   d. 1, 2, 4

7. In the lungs

   a. $P_{CO_2}$ in the alveoli is the same as that in the capillaries
   b. $P_{O_2}$ in the alveoli is the same as that in the capillaries
   c. $P_{CO_2}$ in the alveoli is higher than that in the capillaries
   d. $P_{CO_2}$ in the alveoli is lower than that in the capillaries

8. As blood enters the systemic capillaries

   a. $P_{O_2}$ in the blood is the same as $P_{CO_2}$ in the tissues
   b. $P_{O_2}$ in the blood is higher than that in the tissues
   c. $P_{O_2}$ in the blood is lower than that in the tissues
   d. $P_{O_2}$ in the blood is the same as that in the tissues

9. During swallowing, the glottis is covered by

   a. false vocal cord
   b. true vocal cord
   c. epiglottis
   d. Adam’s apple

10. Which of the following describes a correct order of structures in the respiratory passageways?

   a. pharynx, trachea, larynx, bronchi, bronchioles
   b. larynx, pharynx, trachea, bronchioles, bronchi
   c. trachea, pharynx, larynx, bronchi, bronchioles
   d. pharynx, larynx, trachea, bronchi, bronchioles
11. The volume of air that can be exhaled after normal exhalation is the

   a. tidal volume
   b. residual volume
   c. inspiratory reserve volume
   d. expiratory reserve volume

12. The primary chemical stimulus for breathing is the concentration of

   a. carbon monoxide in the blood
   b. carbon dioxide in the blood
   c. oxygen in the blood
   d. carbonic acid in the blood

13. During internal and external respiration, gases move by

   a. osmosis
   b. active transport
   c. diffusion
   d. endocytosis

14. Most oxygen in the blood is transported

   a. as gas dissolved in plasma
   b. as oxyhemoglobin
   c. as carboxyhemoglobin
   d. as bicarbonate
Answers

1. b
2. a
3. c
4. b
5. c
6. b
7. d
8. b
9. c
10. d
11. d
12. b
13. c
14. b