chapter 9

1. Strep throat:
   A. is a bacterial infection
   B. should be treated with antibiotics
   C. symptoms include severe sore throat and fever
   D. All of the choices are correct.

2. Respiratory gases diffuse through:
   A. small arteries
   B. small veins
   C. arterioles
   D. capillaries
   E. lymph system

3. Infant respiratory distress syndrome involves:
   A. overinflation of infant lungs due to excess surfactant
   B. malfunction of the respiratory center in the brain
   C. collapse of infant lungs due to lack of surfactant
   D. pneumonia in the infant lungs contracted from the mother before birth

4. The manner in which air both enters and exits the lungs is known as:
   A. expiration
   B. respiration
   C. gas exchange
   D. inspiration
   E. ventilation
5. Otitis media is an infection of the:

A. sinuses
B. middle ear
C. auditory tube
D. bronchi
E. alveoli

6. Inspiration involves:

A. flattening of the diaphragm, expansion of the rib cage
B. raising of the diaphragm, relaxation of the rib cage
C. flattening of the rib cage only
D. raising of the rib cage only
E. None of the choices are correct.

7. Acidosis can result from hypoventilation. This means:

A. a higher pH in the blood
B. a lower pH in the blood
C. a neutral pH in the blood.

8. The type of respiration in which gases are exchanged between the blood and the tissue fluid is called:

A. breathing
B. external respiration
C. internal respiration
D. cellular respiration
E. fermentation.

9. Which of the following is NOT an obstructive pulmonary disorder?

A. chronic bronchitis
B. emphysema
C. asthma
D. pulmonary fibrosis
10. The nasal passages join with the oral passage to form the:

A. larynx  
B. pharynx  
C. trachea  
D. uvula

11. Deoxygenated blood becomes oxygenated within capillaries in the:

A. trachea  
B. bronchi  
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12. Tonsillectomies are less frequently performed today because:

A. tonsils rarely become infected  
B. there are more effective antibiotics  
C. children can now become vaccinated for tonsillitis  
D. it is now known that tonsils are the first line of defense against bacterial invasion

13. Destruction of lung tissue, ballooning of the chest, coughing, and breathlessness describe:

A. autoimmune disease  
B. collapsed lung  
C. pneumonia  
D. tuberculosis  
E. emphysema

14. When a person speaks:

A. the epiglottis must not be blocking the larynx  
B. air is expelled through the glottis  
C. the vocal cords vibrate  
D. All of the choices are correct.
15. Which of the following occurs due to smoking?

A. thickening of cells that line the bronchi  
B. loss of cilia  
C. appearance of atypical nuclei  
D. damaged cells  
E. All of the choices are correct.

16. Within the alveoli of the lung, the concentration gradient of carbon dioxide favors diffusion of carbon dioxide:

A. from the blood into the alveoli  
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C. from the lacteals into the tissue fluid

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B. expiration  
C. ventilation

18. The respiratory center in located within the:

A. medulla oblongata of the brain  
B. lungs  
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A. infected pharyngeal tissue  
B. cancerous lung tissue  
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20. Which lung diseases are caused by smoking?

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21. Most of the oxygen that is picked up by the blood in the lungs:

A. dissolves in the plasma  
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A. increases  
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C. stays the same

23. The highest carbon dioxide concentration (partial pressure CO2) is found in the:

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24. Some inhaled air never reaches the lungs. Instead it fills the nasal cavities, trachea, and bronchi. These passages are referred to as:

A. tidal volume spaces  
B. dead air spaces  
C. vital capacity spaces  
D. residual volume space

25. Hemoglobin that has taken up O2 is known as:

A. carbaminohemoglobin  
B. reduced hemoglobin  
C. oxyhemoglobin
26. Which of the following diseases is caused by exposure to particles inhaled primarily in the workplace? (Examples: silica, coal dust, and asbestos):

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27. What factor(s) make it difficult for the person with asthma to exhale?

A. diaphragm does not relax  
B. bronchioles constrict  
C. lungs do not inflate  
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28. A lung disease caused by bacteria that become encapsulated is called:

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29. The process of respiration includes:

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30. The respiratory center of the brain:

A. decreases the rate and depth of breathing if $H^+$ increases in the blood  
B. increases the rate and depth of breathing if $H^+$ increases in the blood  
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31. Hyperventilating is:
   A. breathing at an increased rate
   B. breathing at a decreased rate

32. During external respiration:
   A. oxygen enters the blood from the alveoli
   B. carbon dioxide leaves the blood
   C. oxygen leaves the blood into the tissues
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33. Why are gases only exchanged at the alveoli in the lungs?
   A. The alveoli are one-cell thick and therefore best allow the diffusion of respiratory gases.
   B. The bronchi and bronchioles have a serous lining.
   C. Cells of the alveoli have receptors for oxygen and carbon dioxide that other tissues do not.
   D. They receive a blood supply while other respiratory structures do not.

34. The greatest surface area for gas exchange occurs within the:
   A. trachea
   B. bronchi
   C. bronchioles
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35. Chemoreceptors for the detection of low oxygen levels are located in the:
   A. carotid arteries
   B. aorta
   C. vena cave
   D. carotid arteries and aorta
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36. Hemoglobin is useful because it:
   A. transports oxygen
   B. transports carbon dioxide
   C. helps act as a buffer to maintain a stable pH
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B. movement of mucus
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40. The amount of air which enters and leaves the respiratory tract in one resting breath is called the:

A. residual volume
B. tidal volume
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41. In active tissues, temperature increases and pH decreases. These conditions will cause hemoglobin to:

A. take up more oxygen from the alveolar air
B. bind the oxygen it is carrying more tightly
C. release more of its oxygen to the tissues
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42. The vocal cords are found in the:

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43. Which is the correct sequence of air movement during inspiration?

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49. How is voice pitch varied?

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