Chapter 11 Test

Answer each question to the best of your abilities.

1. The gaseous exchange system links the circulatory system with the atmosphere. It is adapted to:
2. The \_\_\_\_\_\_\_\_\_\_\_\_ are the site of gaseous exchange between air and blood.
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the trachea and bronchi keeps these airways open and air resistance low, and prevents from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as the air pressure changes during breathing.
4. The moist air protects the inside of the lungs from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. Dust, pollen, and bacteria are caught by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. Any of the tiny air sacs in the lungs where the exchange of oxygen and carbon dioxide takes place is known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. What is the total volume of air moved into the lungs in one minute?
8. What is the residual volume?
9. Define stroke volume.
10. Define cardiac output.
11. True or False: The pulse rate is not identical to the heart rate.
12. What is blood pressure and how is it determined?
13. Name 3 conditions that are closely linked with hypertension.
14. What is the site of gaseous exchange?
15. Determine the difference between systolic and diastolic pressure.

Answer Key

1. Clean and warm the air that enters during breathing;

Maximize the surface area for diffusion of oxygen and carbon dioxide between the blood and atmosphere

Minimize the distance for this diffusion

Maintain the adequate gradients for this diffusion

1. Lungs
2. Cartilage; collapsing; bursting
3. Desiccation or drying out
4. Nose hair and mucus lining
5. Alveoli
6. Ventilation Rate
7. When the chest is compressed during forced exhalations, there is still air remaining in the alveoli and the airways.
8. The volume of blood pumped out from each ventricle during each concentration.
9. The total volume pumped out per minute.
10. False
11. Blood pressure is the measure of how hard the heart is working to pump blood around the body and is determined by using a sphygmomanometer.
12. Possibilities may included: excessive alcohol intake, smoking obesity, too much salt in diet, and genetic factors
13. The alveoli is the site of gaseous exchange.
14. The maximum arterial pressure during the contraction of the left ventricle is systolic pressure. The minimum pressure in the arteries is the diastolic pressure.