

CHAPTER TWO TEST BANK

MULTIPLE CHOICE QUESTIONS

1. The pulmonary apparatus is made up of
 - a. The diaphragm and trachea
 - b. The trachea, bronchi, bronchioles, alveoli, and lungs
 - c. The rib cage, abdomen, and lungs
 - d. The upper respiratory system
2. The filtering process that cleans air going into the lungs is achieved by
 - a. Surfactant within the alveoli of the lungs
 - b. Cilia present in the tracheal epithelium
 - c. Cartilaginous structure of the bronchi
 - d. Tracheal flexibility
3. During exhalation
 - a. Alveolar pressure is positive.
 - b. Alveolar pressure is negative.
 - c. The thoracic cavity expands.
 - d. The diaphragm contracts and flattens.
4. Which statement is true of resting expiratory level?
 - a. State of equilibrium in the respiratory system.
 - b. Moment when alveolar pressure equals atmospheric pressure.
 - c. Occurs at the end of every exhalation.
 - d. All of the above statements are true.
5. The volume of air that can be exhaled below tidal volume is known as
 - a. Inspiratory Reserve Volume
 - b. Residual Volume
 - c. Expiratory Reserve Volume
 - d. None of the above
6. Inspiratory capacity is
 - a. The amount of air that can be inhaled from end-expiratory level.
 - b. The amount of air that can be inhaled above vital capacity.
 - c. The combination of tidal volume plus expiratory reserve volume (TV + ERV)
 - d. None of the above
7. Normal adult quiet breathing and conversational speech use approximately what percent of vital capacity, respectively?
 - a. 10, 15 %
 - b. 10, 20 %
 - c. 15, 20 %
 - d. 15, 30 %

8. The passive recoil forces that occur during exhalation generate pressure known as
- recoil pressure
 - relaxation pressure
 - alveolar pressure
 - A & B
9. All of the following influence speech breathing patterns **EXCEPT**
- Complexity of the speaking task.
 - Language being spoken by the speaker.
 - Type of phoneme being uttered.
 - Intended loudness of the spoken utterance.
10. Elderly adults may show which of the following characteristics?
- Large rib cage and lung volume initiation and excursions.
 - Larger volumes of air expended per speech breath.
 - Fewer syllables per breath.
 - All of the above.

TRUE AND FALSE QUESTIONS

1. The left lung is larger than the right lung, and is composed of three lobes.
- A) TRUE B) FALSE
2. As the bronchial tree continues to subdivide, the total surface area of the smaller branches is greatly increased.
- A) TRUE B) FALSE
3. When the diaphragm contracts, the lower rib cage raises, increasing the volume of the thoracic cavity.
- A) TRUE B) FALSE
4. Positive pressure in the pleural space keeps the lungs and thorax connected and allows them to function as one unit.
- A) TRUE B) FALSE
5. During speech, the rate of recoil forces must be controlled and the inspiratory muscles must contract in order to prevent the thoracic cavity and lungs from deflating too quickly.
- A) TRUE B) FALSE
6. The abdominal muscles are only engaged during speech breathing when stressing specific syllables or speaking a louder utterance.
- A) TRUE B) FALSE

7. Residual volume is not under voluntary control and can never be voluntarily expired.

A) TRUE B) FALSE

8. The abdominal wall is more efficient than the rib cage at changing lung volumes.

A) TRUE B) FALSE

9. Voiced stops and affricates require a higher flow of air through the system than voiceless stops and fricatives.

A) TRUE B) FALSE

10. Due to their small airways, young children tend to generate higher pressures for speech than adults.

A) TRUE B) FALSE

SHORT ANSWER QUESTIONS

1. Describe how the anatomy of the trachea allows it to act as both a flexible and supportive filter.
2. Discuss the differences in rate of breathing between children and adults, including the anatomical reasons for such differences.
3. Describe how changes in alveolar pressure contribute to inhalation and exhalation.
4. Discuss at least two linguistic influences that affect patterns of speech breathing.
5. Define resting expiratory level and explain its relationship to lung volumes and capacities.

ESSAY QUESTIONS

1. Describe pleural linkage, making sure to include all the anatomical structures that contribute to this mechanism.
2. Identify and discuss the five changes that occur when switching from life breathing to speech breathing.
3. Explain how speech breathing develops in children through the stages of emergence, refinement, and adaptation.
4. Discuss the anatomic and physiological changes in the respiratory system that occur during the aging process, and how such changes may affect speech breathing in older adults.
5. Describe the role of the abdominal muscles in both inhalation and exhalation.

CHAPTER 2

MULTIPLE CHOICE ANSWERS:

1. B.
2. B.
3. A.
4. A.
5. C.
6. A.
7. B.
8. B.
9. B.
10. D.

TRUE/FALSE ANSWERS:

1. FALSE
2. TRUE
3. TRUE
4. FALSE
5. TRUE
6. FALSE
7. TRUE
8. FALSE
9. FALSE
10. TRUE

