

Hand written answers only, use the back or attach additional pages as needed.

- A. Draw with labels the histology of the respiratory exchange membrane & give its function.
- B. Draw with labels the histology of the epithelial lining of the upper respiratory tract and give two functions.
- C. Explain the following gas laws:
 - i. Boyle's Law _____
 - ii. Dalton's Law _____
 - iii Henry's Law _____
 and explain Ohm's Law _____
- D. Name the major/primary gas transport mechanism in the body for
 - Oxygen _____
 - Carbon Dioxide _____
 - Nitrogen _____
- E. Name **ALL** the bones involved with the respiratory system
- F. Describe the pathway of circulation naming **ALL** structures for the pulmonary circuit
- G. Give the source, composition, and function of surfactant.
- H. Name all the cartilages of the larynx, give their histological type, and two functions for this region.
- I. Name four somatic motor nerves that control skeletal muscles of respiration.
- J. Give the location of the respiratory centers in the brain and describe their functions
- K. Write out the CO₂ formula that relates to the bicarbonate-carbonic acid buffer and explain how CO₂ relates to pH and H⁺
- L. Explain how the respiratory system controls the acid/base balance in the body
- M. Name two lung volumes and two lung capacities and the instrument used to measure.
- N. Name and define the four (4) phases of respiration
- O. Give the function of these areas and name a unique and different problem.

Area	Function	Unique Problem
Nasal Cavity		
Trachea		
Pleura		
Pharynx		
Alveoli		
Larynx		
Bronchiole		