

## Gaseous Exchange

Sr	Questions	Answers Choice
1	What substance in red blood cells is primarily responsible for transporting oxygen in the blood?	A. Plasma B. Hemoglobin C. Platelets D. White blood cells
2	Rate of breathing depends upon concentration of which gas:	A. Oxygen B. Carbon dioxide C. Nitrogen D. Hydrogen
3	During intense daylight, what is the predominant net gaseous exchange occurring in the leaves of a photosynthesizing plant?	A. Intake of oxygen and release of carbon dioxide. B. Intake of carbon dioxide and release of oxygen. C. Equal intake and release of both oxygen and carbon dioxide. D. No net exchange of gases occurs.
4	Stomata are present in:	A. Phloem B. Xylem C. Endodermis D. Epidermis
5	Submerged aquatic plants perform gaseous exchange primarily through which of the following?	A. Well-developed stomata on their leaves. B. Lenticels located on their stems. C. Their entire general body surface. D. Specialized air roots (pneumatophores).
6	Which kind of blood vessels are present around the alveoli?	A. Artery B. Capillary C. Arteriole D. Veins
7	During periods of intense photosynthesis, what is the net gaseous exchange of a plant leaf with its environment?	A. Takes in O <sub>2</sub> , releases CO <sub>2</sub> B. Takes in CO <sub>2</sub> , releases O <sub>2</sub> C. Releases both O <sub>2</sub> and CO <sub>2</sub> D. Takes in both O <sub>2</sub> and CO <sub>2</sub>
8	During nighttime, what is the net gaseous exchange observed in most plants?	A. Intake of CO <sub>2</sub> and release of O <sub>2</sub> B. Release of CO <sub>2</sub> and intake of O <sub>2</sub> C. Release of both CO <sub>2</sub> and O <sub>2</sub> D. No significant gaseous exchange occurs
9	What happens to the stomata in most plants during the night?	A. They open wider to release excess oxygen. B. They remain unchanged, irrespective of light. C. They close to conserve water and prevent gas loss. D. They partially open to allow minimal gas exchange.
10	Lungs are enclosed in a membrane called;	A. peritonium B. pleural membrane C. epidermis pericardium
11	Which of the following is called voice box?	A. Trachea B. Larynx C. Bronchi D. Alveoli
12	The air spaces present in the spongy mesophyll of a leaf are crucial for which process?	A. Absorbing sunlight for photosynthesis. B. Storing excess water for drought conditions. C. Facilitating the diffusion of gases throughout the leaf. D. Providing mechanical support to the leaf structure.
13	Amount of carbon dioxide in inspired air is:	A. 16% B. 0.04% C. 16%

		C. 4% D. None of these
14	Once inside the leaf, where do gases like CO <sub>2</sub> and O <sub>2</sub> primarily dissolve before diffusing into individual cells?	A. In the cell wall material B. In the water film lining the intercellular spaces C. Directly into the cytoplasm D. In the chloroplast stroma
15	Which respiratory disorder is characterized by the inflammation of the bronchial tubes, leading to excessive mucus production and persistent coughing?	A. Emphysema B. Asthma C. Bronchitis D. Pneumonia
16	The primary role of guard cells in plant leaves is to:	A. Carry out photosynthesis. B. Absorb water from the atmosphere. C. Regulate the opening and closing of stomata. D. Provide structural support to the leaf.
17	No. of bronchi in the air passage way are:	A. 1 B. 2 C. 3 D. 4
18	How many carcinogens are present in cigarette smoke?	A. 40 B. 50 C. 60 D. 70
19	Which statement accurately describes lenticels?	A. They are found primarily on the upper epidermis of leaves. B. They are regulated by guard cells to control gas exchange. C. They are permanent pores in the bark of woody stems and roots. D. They are involved in the absorption of water from the soil.
20	Where does the gaseous exchange occur in humans:	A. Pharynx B. Larynx C. Trachea D. Epiglottis