

## Gaseous Exchange

Sr	Questions	Answers Choice
1	Point out the FALSE statement about respiration.	<p>A. Gases can easily pass through the walls of the alveoli</p> <p>B. Gas exchange in lungs is very efficient because lungs provide large surface area</p> <p><b>C. In emphysema, the walls of alveoli break and there is more surface area.</b></p> <p>D. Dust particles can damage the lung by irritating the inner alveoli surface.</p>
2	All the alveoli of one side unite to form:	<p><b>A. Lung</b></p> <p>B. Kidney</p> <p>C. Thorax</p> <p>D. Chest Box</p>
3	Which structure actively helps in taking the air out of lungs?	<p>A. Nasal cavity</p> <p>B. Bronchus</p> <p>C. Bronchiole</p> <p><b>D. Diaphragm</b></p>
4	Lenticels are small pores found on the surface of which plant structures, enabling gaseous exchange?	<p>A. Young leaves</p> <p>B. Flower petals</p> <p><b>C. Woody stems and roots</b></p> <p>D. Fruit skins</p>
5	During nighttime, when there is no light available for photosynthesis, what is the predominant net gaseous exchange pattern observed in most plants?	<p>A. Plants primarily take in carbon dioxide and release oxygen.</p> <p><b>B. Plants primarily take in oxygen and release carbon dioxide.</b></p> <p>C. Plants take in both oxygen and carbon dioxide in equal amounts.</p> <p>D. There is no significant gaseous exchange occurring at night.</p>
6	How do submerged aquatic plants primarily exchange gases with their surrounding water environment?	<p>A. Through specialized stomata on their leaves</p> <p>B. Via lenticels present on their stems</p> <p><b>C. Across their general body surface and cell membranes</b></p> <p>D. By means of root hairs absorbing dissolved gases</p>
7	Which respiratory disorder is characterized by inflammation and narrowing of the airways, often triggered by allergens or exercise?	<p>A. Emphysema</p> <p>B. Bronchitis</p> <p><b>C. Asthma</b></p> <p>D. Pneumonia</p>
8	What happens to the stomata in most plants during the night?	<p>A. They open wider to release excess oxygen.</p> <p>B. They remain unchanged, irrespective of light.</p> <p><b>C. They close to conserve water and prevent gas loss.</b></p> <p>D. They partially open to allow minimal gas exchange.</p>
9	Chronic bronchitis is primarily caused by prolonged exposure to which of the following?	<p>A. Viral infections</p> <p>B. Bacterial infections</p> <p><b>C. Air pollution and smoking</b></p> <p>D. Genetic predisposition</p>
10	Where does the gaseous exchange occur in humans:	<p>A. Pharynx</p> <p><b>B. Larynx</b></p> <p>C. Trachea</p> <p>D. Epiglottis</p>
11	What is the primary characteristic of asthma?	<p>A. Permanent damage to alveolar walls</p> <p>B. Inflammation of the pharynx</p> <p><b>C. Spasms of the bronchi and bronchioles, narrowing the airways</b></p> <p>D. Fluid accumulation in the pleural</p>

		cavity
12	Which statement accurately describes lenticels?	<p>A. They are found primarily on the upper epidermis of leaves.</p> <p>B. They are regulated by guard cells to control gas exchange.</p> <p>C. They are permanent pores in the bark of woody stems and roots.</p> <p>D. They are involved in the absorption of water from the soil.</p>
13	Which gas is absorbed through stomata of plant during night?	<p>A. Carbon dioxide</p> <p>B. Oxygen</p> <p>C. Nitrogen</p> <p>D. Hydrogen</p>
14	In first step of glycolysis glucose molecules break and divide into two _____ molecules	<p>A. Citric acid</p> <p>B. Lactic acid</p> <p>C. Pyruvic acid</p> <p>D. Formic acid</p>
15	Which respiratory disorder is characterized by the inflammation of the bronchial tubes, leading to excessive mucus production and persistent coughing?	<p>A. Emphysema</p> <p>B. Asthma</p> <p>C. Bronchitis</p> <p>D. Pneumonia</p>
16	In wood stems and roots the gaseous:	<p>A. Lenticels</p> <p>B. epidermal cells</p> <p>C. stomata</p> <p>D. micropyle</p>
17	In which of the following disease, the patient has usually lost 50% to 70% of his/her lung tissue when symptoms appear?	<p>A. Pneumonia</p> <p>B. Asthma</p> <p>C. Emphysema</p> <p>D. Bronchitis</p>
18	Smoking may also lead to the cancers in:	<p>A. Kidneys and pancreas</p> <p>B. Oral cavity and larynx</p> <p>C. Breast and bladder</p> <p>D. All of them</p>
19	In plants, gaseous exchange takes place as:	<p>A. CO<sub>2</sub> is removed and O<sub>2</sub> is absorbed</p> <p>B. CO<sub>2</sub> is absorbed and O<sub>2</sub> is removed</p> <p>C. CO<sub>2</sub> and O<sub>2</sub> both are absorbed</p> <p>D. CO<sub>2</sub> and O<sub>2</sub> both are removed</p>
20	The opening and closing of stomata are regulated by the turgidity of which specialized cells?	<p>A. Epidermal cells</p> <p>B. Mesophyll cells</p> <p>C. Guard cells</p> <p>D. Companion cells</p>