

## Gaseous Exchange

Sr	Questions	Answers Choice
1	Which gas diffuses from the alveoli into the blood capillaries during the process of gaseous exchange?	A. Carbon dioxide B. Oxygen C. Nitrogen D. Methane
2	In man the system of gaseous exchange is:	A. digestive system B. respiratory system C. nervous system D. excretory system
3	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
4	The process of gaseous exchange involves.	A. Break down of C-H bonds to yield energy. B. Physical movements that take air in and out of body C. Getting oxygen from the air and removing carbon dioxide D. Transport of oxygen by the blood to different parts of the body.
5	Which structure actively helps in taking the air out of lungs?	A. Nasal cavity B. Bronchus C. Bronchiole D. Diaphragm
6	The opening and closing of stomata, which regulate the rate of gaseous exchange in leaves, are directly controlled by changes in the turgor pressure within which specialized cells?	A. Epidermal cells B. Mesophyll cells C. Guard cells D. Palisade cells
7	Which sequence correctly represents the path of air from the outside environment to the alveoli during inhalation?	A. Nasal cavity → Pharynx → Larynx → Trachea → Bronchi → Bronchioles → Alveoli B. Larynx → Pharynx → Nasal cavity → Trachea → Bronchi → Bronchioles → Alveoli C. Nasal cavity → Trachea → Pharynx → Larynx → Bronchi → Bronchioles → Alveoli D. Pharynx → Nasal cavity → Larynx → Trachea → Bronchi → Bronchioles → Alveoli
8	All the alveoli of one side unite to form:	A. Lung B. Kidney C. Thorax D. Chest Box
9	How many lobes are present in right lung?	A. 2 B. 3 C. 4 D. 5
10	A disease involving the breakdown of air sacs of the lungs is:	A. Bronchitis B. emphysema C. pneumonia D. asthma
11	The structural and functional unit of lungs is:	A. trachea B. pharynx C. bronchioles D. alveolus
12	Which of the following is the main nitrogenous waste product excreted by the human urinary system?	A. Carbon dioxide B. Bile C. Urea D. Lactic acid

A. nostrils, nasal, cavity, pharynx, trachea, larynx, bronchi, bronchioles

13	In man the correct passage of air is:	<p>alveolar, duct, alveoli</p> <p>B. nostrils, nasal cavity, Pharynx, larynx, bronchi, trachea, bronchioles, alveolar duct, alveoli</p> <p>C. Nostrils, nasal, cavity, larynx, pharynx, trachea, bronchioles, alveolar, duct alveoli,</p> <p>D. Nasal cavity, nostrils, larynx, pharynx, alveoli, trachea bronchi, bronchioles, alveolar duct,</p>
14	After entering stomata, through which pathway do gases primarily reach the mesophyll cells in a plant leaf?	<p>A. Vascular bundles</p> <p>B. Intercellular air spaces</p> <p>C. Xylem vessels</p> <p>D. Phloem tubes</p>
15	The respiratory disease that is the destruction of the walls of Alveoli is;	<p>A. Asthma</p> <p>B. Pneumonia</p> <p>C. Emphysema</p> <p>D. Bronchitis</p>
16	Which part of the human respiratory system is responsible for the actual exchange of gases (oxygen and carbon dioxide)?	<p>A. Trachea</p> <p>B. Bronchi</p> <p>C. Alveoli</p> <p>D. Larynx</p>
17	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>C. Across their general body surface and cell membranes</p> <p>D. By means of root hairs absorbing dissolved gases</p>
18	How do the cells of plant roots primarily obtain the oxygen required for cellular respiration?	<p>A. Directly from the atmosphere through lenticels on roots</p> <p>B. Through diffusion from air spaces in the soil</p> <p>C. Transported from leaves via phloem</p> <p>D. Produced during photosynthesis in root cells</p>
19	At night, when photosynthesis is not occurring, what is the net gaseous exchange between a plant and its environment?	<p>A. Plants take in CO<sub>2</sub> and release O<sub>2</sub>.</p> <p>B. Plants take in O<sub>2</sub> and release CO<sub>2</sub>.</p> <p>C. Plants take in both CO<sub>2</sub> and O<sub>2</sub>.</p> <p>D. There is no gaseous exchange.</p>
20	Amount of oxygen in expired air is:	<p>A. 21%</p> <p>B. 16%</p> <p>C. 0.04%</p> <p>D. 4%</p>