

Gaseous Exchange

Sr	Questions	Answers Choice
1	During exercise or other hard physical works the breathing rate may increase up to.	A. 30-40 times per minute B. 50-60 times per minute C. 60-70 times per minute D. 70-80 times per minute
2	In wood seems and roots the gaseous:	A. lenticels B. epidermal cells C. somata D. micropyle
3	The movement of gases like oxygen and carbon dioxide across the cell membranes in plants primarily occurs by the process of:	A. Active transport B. Osmosis C. Diffusion D. Facilitated diffusion
4	The percentage of oxygen from air which we inspired is:	A. 15 % B. 21% C. 25% D. 28%
5	Smoking may also lead to the cancers in:	A. Kidneys and pancreas B. Oral cavity and larynx C. Breast and bladder D. All of them
6	Within the internal structure of a plant leaf, what is the main function of the numerous interconnected intercellular air spaces surrounding the mesophyll cells?	A. To store excess water for drought conditions B. To facilitate the transport of sugars to other parts of the plant C. To allow for efficient diffusion of gases like CO ₂ and O ₂ throughout the leaf D. To provide structural support and rigidity to the leaf tissue
7	Which gas is a waste product of cellular respiration and is expelled from the human body during exhalation?	A. Oxygen B. Nitrogen C. Carbon dioxide D. Methane
8	During nighttime, what is the net gaseous exchange observed in most plants?	A. Intake of CO ₂ and release of O ₂ B. Release of CO ₂ and intake of O ₂ C. Release of both CO ₂ and O ₂ D. No significant gaseous exchange occurs
9	Cutting of walls of Alveoli called:	A. Pneumonia B. Emphysema C. Bronchitis D. Asthama
10	A condition where the walls of the alveoli are damaged, leading to an enlargement of air spaces and a reduction in the surface area for gas exchange, is called:	A. Asthma B. Pneumonia C. Bronchitis D. Emphysema
11	In leaves, what is the primary function of the air spaces between spongy mesophyll cells regarding gaseous exchange?	A. To store excess water. B. To facilitate the diffusion of gases throughout the leaf. C. To produce chlorophyll for photosynthesis. D. To provide structural support to the leaf.
12	How many bronchi are there in the air passageway?	A. One B. Two C. Many D. None of these
13	What is the primary function of the diaphragm in human respiration?	A. To filter incoming air B. To warm and moisten air C. To contract and relax, changing lung volume D. To prevent food from entering the windpipe

14	The process by which essential substances like glucose, amino acids, and some salts are reabsorbed back into the blood from the renal tubule is known as:	A. Glomerular filtration B. Tubular reabsorption C. Tubular secretion D. Micturition
15	In young stems and leaves, the epidermal cells are covered with a waxy layer called the cuticle. What is its primary function concerning gaseous exchange?	A. To absorb gases more efficiently. B. To prevent excessive water loss, thereby limiting non-stomatal gas exchange. C. To increase the surface area for gas exchange. D. To facilitate the entry of carbon dioxide.
16	The structural and functional unit of lungs is:	A. trachea B. pharynx C. bronchioles D. alveolus
17	Which kind of blood vessels are present around the alveoli?	A. Artery B. Capillary C. Arteriole D. Veins
18	What happens during Exhalation?	A. Ribs muscles relax B. Diaphragm become dome shaped C. Pressure on lungs increased D. All of these
19	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
20	The opening and closing of stomata are regulated by the turgidity of which specialized cells?	A. Epidermal cells B. Mesophyll cells C. Guard cells D. Companion cells