

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	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.
3	Which disease is caused by Streptococcus pneumoniae?	A. Bronchitis B. Emphysema C. Pneumonia D. Asthma
4	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.
5	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
6	The inflammation of bronchi or bronchioles is called:	A. Bronchitis B. Emphysema C. Pneumonia D. Chest box
7	What percentage of oxygen inhaled from air during breathing?	A. 21% B. 22% C. 23% D. 24%
8	What are the tiny air sacs in the lungs where the actual exchange of gases (oxygen and carbon dioxide) occurs?	A. Bronchi B. Trachea C. Bronchioles D. Alveoli
9	In normal condition human respiration rate is:	A. 12 to 15 per minute B. 15 to 12 per minute C. 10 to 12 per minute D. 16 to 20 per minute
10	What is the main characteristic of pneumonia, a lung infection?	A. Permanent dilation of bronchi B. Inflammation of the lining of the lungs and fluid accumulation in alveoli C. Spasms of the bronchial tubes D. Destruction of the cilia in the trachea
11	Amount of carbon dioxide in inspired air is:	A. 16% B. 0.04% C. 4% D. None of these
12	In which of the following gaseous exchange occurs through stomata?	A. The leaves and young stems B. Wood stems and mature roots. C. Young roots D. The aquatic plants
13	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

14 How do root hair cells primarily obtain oxygen for respiration from the soil?

A. Through direct absorption from atmospheric air.
B. By diffusing from air spaces present in the soil.
C. By actively transporting oxygen from water.
D. By producing their own oxygen through photosynthesis.

15 Which gas is released by plants during cellular respiration, both day and night?

A. Oxygen
B. Carbon dioxide
C. Methane
D. Hydrogen

16 The correct list of respiratory disorders is;

A. Asthma, emphysema, pneumonia, bronchitis
B. Asthma, pneumonia, haemophilia, typhoid,
C. Asthma, blood, cancer, emphysema, cholera
D. Asthma, cholera, emphysema, malaria

17 Point out the FALSE statement about respiration.

A. Gases can easily pass through the walls of the alveoli
B. Gas exchange in lungs is very efficient because lungs provide large surface area
C. In emphysema, the walls of alveoli break and there is more surface area.
D. Dust particles can damage the lung by irritating the inner alveoli surface.

18 Which structure actively helps in taking the air out of lungs?

A. Nasal cavity
B. Bronchus
C. Bronchiole
D. Diaphragm

19 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

20 Which of the following correctly represents the path of urine out of the human body?

A. Kidney → Urethra → Ureter → Urinary Bladder
B. Kidney → Urinary Bladder → Ureter → Urethra
C. Kidney → Ureter → Urinary Bladder → Urethra
D. Kidney → Urinary Bladder → Urethra → Ureter
