

Gaseous Exchange

Sr	Questions	Answers Choice
1	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
2	The respiratory disease that is the destruction of the walls of Alveoli is;	A. Asthma B. Pneumonia C. Emphysema D. Bronchitis
3	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
4	The length of trachia is _____ cm approximately:	A. 10 B. 12 C. 14 D. 16
5	Which structures are primarily responsible for gaseous exchange in the leaves of most plants?	A. Xylem B. Phloem C. Stomata D. Cuticle
6	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
7	How many pairs of ribs in humans?	A. 12 B. 24 C. 26 D. 30
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	Which disease is involved in the breakdown of air sacs of the lungs?	A. Bronchitis B. Emphysema C. Pneumonia D. Asthma
10	During nighttime, when there is no light available for photosynthesis, what is the predominant net gaseous exchange pattern observed in most plants?	A. Plants primarily take in carbon dioxide and release oxygen. B. Plants primarily take in oxygen and release carbon dioxide. C. Plants take in both oxygen and carbon dioxide in equal amounts. D. There is no significant gaseous exchange occurring at night.
11	Which of the following conditions generally causes stomata to open in most plants during the day?	A. Low light intensity. B. High internal CO ₂ concentration. C. High turgor pressure in guard cells. D. Dry atmospheric conditions.
12	Pneumonia is an infection of the lungs that can be caused by bacteria, viruses, or fungi. What is the main effect of pneumonia on the lungs?	A. Thickening of the vocal cords B. Collapse of the trachea C. Inflammation and fluid accumulation in the alveoli D. Hardening of the diaphragm
13	How do submerged aquatic plants primarily exchange gases with their surrounding water environment?	A. Through specialized stomata on their leaves B. Via lenticels present on their stems C. Across their general body surface and cell membranes

14 In leaves, what is the primary function of the air spaces between spongy mesophyll cells regarding gaseous exchange?

D. By means of root hairs absorbing dissolved gases

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.

15 Cartilage is absent in:

A. larynx
B. trachea
C. bronchi
D. bronchioles

16 The rate of breathing during exercise or other hard physical work is:

A. 10-20 times
B. 20-30 times
C. 30-40 times
D. 40-50 times

17 The normal breathing rate in human being is:

A. 10-40 times per minute
B. 16-20 times per minute
C. 30-40 times per minute
D. None of these

18 Which disease is caused by Streptococcus pneumoniae:

A. Bronchitis
B. Emphysema
C. Pneumonia
D. Asthma

19 The correct list of respiratory disorders is;

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

20 In old woody stems and roots, gaseous exchange occurs through specialized pores called:

A. Stomata
B. Lenticels
C. Root hairs
D. Epidermis