

Gaseous Exchange

Sr	Questions	Answers Choice
1	Amount of carbon dioxide in inspired air is:	A. 16% B. 0.04% C. 4% D. None of these
2	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
3	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
4	No. of bronchi in the air passage way are:	A. 1 B. 2 C. 3 D. 4
5	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.
6	After entering stomata, through which pathway do gases primarily reach the mesophyll cells in a plant leaf?	A. Vascular bundles B. Intercellular air spaces C. Xylem vessels D. Phloem tubes
7	A thick muscular layer beneath lungs is called:	A. Kidney B. Diaphragm C. Bladder D. Ureter
8	Lenticels are small pores found on the surface of which plant structures, enabling gaseous exchange?	A. Young leaves B. Flower petals C. Woody stems and roots D. Fruit skins
9	A cough, mild wheezing, fever chills and shortness of breath are symptoms of:	A. Emphysema B. Pneumonia C. Bronchitis D. Asthma
10	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
11	Which waxy layer on the surface of plant leaves acts as a primary barrier to uncontrolled gaseous exchange and water loss, but also limits direct gas diffusion?	A. Epidermis B. Cuticle C. Cell wall D. Stomata
12	In which of the following gaseous exchange occur through stomata?	A. The leaves and young stems B. Wood stems and nature roots. C. Young roots D. The aquatic plants
13	The respiratory centre is present in :	A. Lungs B. Brain C. Nose D. ...

D. Muscles

14	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
15	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
16	What percentage of oxygen inhaled from air during breathing?	A. 21% B. 22% C. 23% D. 24%
17	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
18	The number of lobes in right lung is:	A. 1 B. 2 C. 3 D. 4
19	Which respiratory disorder is characterized by inflammation and narrowing of the airways, often triggered by allergens or exercise?	A. Emphysema B. Bronchitis C. Asthma D. Pneumonia
20	During intense daylight, what is the predominant net gaseous exchange occurring in the leaves of a photosynthesizing plant?	A. Intake of oxygen and release of carbon dioxide. B. Intake of carbon dioxide and release of oxygen. C. Equal intake and release of both oxygen and carbon dioxide. D. No net exchange of gases occurs.