



INDIAN SCHOOL MUSCAT
SENIOR SECTION
DEPARTMENT OF BIOLOGY
CLASS XI
BREATHING AND EXCHANGE OF GASES
WORKSHEET- 2

Very Short Answer Questions

1. Name the organ in human respiratory system which produces sound.
2. Give the name and function of a fluid filled double membranous layer which surrounds the lungs.
3. Name the types of respiratory organs in the following organisms:
a) Earthworms b) Insects c) Terrestrial organisms.
4. How many oxygen molecules can be carried out by one haemoglobin molecules.
5. Food or water does not normally enter the respiratory passage. Give reason.
6. Which organ of our respiratory system acts as primary site of exchange of gases?
7. Cigarette smoking causes emphysema. Give reason.
8. Write the function of pleural fluid.
9. Name the principle of exchange of gases.
10. Why does exchange of gases continue to occur in the lungs even if you hold your breath for 30 seconds.
11. Define the following: a) Tidal volume b) Residual volume c) Vital capacity
d) Total lung capacity

Short Answer Questions

12. Enumerate the harmful effects of various occupational respiratory disorders. What precautionary measures should a person take to prevent such disorders?
13. Mention the partial pressure of oxygen and carbon dioxide at different parts involved in diffusion in comparison to those in atmosphere.
14. Explain the role of neural system in regulation of respiration in human.
15. Explain in brief the oxygen dissociation curve? Write its significance.
16. List the factors facilitating the formation of oxyhaemoglobin.
17. Differentiate between Vital capacity and Total lung capacity
18. Write the major transport mechanisms of oxygen and carbon dioxide in our body.
19. What are the two factors that contribute towards the dissociation of oxyhaemoglobin in the arterial blood to release molecular oxygen in an active tissue?
20. Enumerate the three major forms by which the carbon dioxide is carried in the blood.

Draw labeled diagrams of:

- A) A section of an alveolus with a pulmonary capillary
- B) Inspiration and Expiration
- C) Human respiratory system.
- D) Exchange of gases at the alveolus and the body tissues.

