

## Biology - FSC Part 1 Biology English Medium Chapter 13 Preparation

Q1. Differentiate between spiracles and tracheoles.

**Ans 1:** Spiracles : The trachea open to exterior by pores on the surface called spiracles, There are ten pairs of spiracles present on the lateral sides of the body.

**Ans 2:** Tracheoles: The main trachea divide and subdivide forming very fine tubules called tracheos .They continuously supply oxygen to living cells directly.

Q2. How rubisco decide either oxygenase or carboxylase?

**Ans 1:** The most important factor which decides that when rubisco will work as carboxylase or oxygenase is the relative concentration of carbon dioxide and oxygen in the leaf.

Q3. Enlist properties of respiratory surface in animals.

**Ans 1:**

1. Large surface and moisture.
2. Ventilation
3. Thin epithelium
4. Capillary network

Q4. What is external respiration?

**Ans 1:** The exchange of respiratory gasses between the organisms and its environment is called external respiration/organisms respiration.

Q5. Give % age of CO<sub>2</sub>in venous and arterial blood.

**Ans 1:** The percentage of CO<sub>2</sub>in venous blood is 54 ml per 100 ml of blood while percentage of CO<sub>2</sub> in arterial blood is 50 ml per 100 ml of blood.

Q6. What is diving reflex? How is it generated?

**Ans 1:** Diving mammals can stay in the depth of the oceans for about two hours without coming up for air due to activation of the process called diving reflex.

Q7. What is emphysema? Give its effects and cause.

**Ans 1:** Emphysema is breakdown of alveoli. In the result of constant coughing the absorbing surface of the lungs is greatly reduced.

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Q8. In hot and dry season, level of O<sub>2</sub> rises inside the leaf. Give its reasons.

**Ans 1:** In hot and dry day the level of oxygen inside the leaf rises. This is because the stomata close to prevent the loss of water. The level of oxygen rises because closed stomata do not let it go out.

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Q9. What factors keep the skin of earthworm moist for gaseous exchange?

**Ans 1:** The skin is richly supplied with blood capillaries and remain moist with the secretion of the skin and bu coelomic fluid.

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Q10. What are spiracles? Give their function.

**Ans 1:** The trachea open to exterior by pores on the surface called spiracles. There are ten pairs of spiracles, present on the lateral side of the body. These are in ten pairs, Two pairs are located in the thorax and eight pairs are located in the abdomen.

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