

Name:

Class:



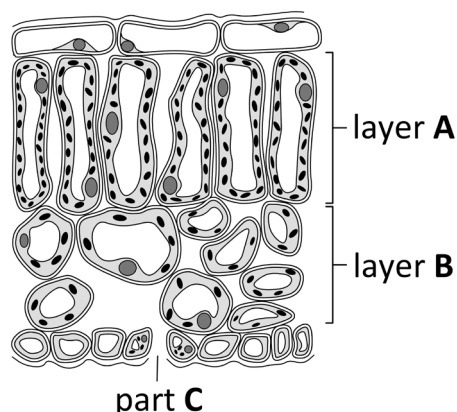
Which hormone causes ovulation?

- A** Luteinising hormone
B Follicle stimulating hormone
C Testosterone
D Progesterone

How does oxygen move across the alveolar membrane into the capillary?

- A** Osmosis
B By active transport
C By diffusion

The figure below shows a cross section of a leaf.



i. What is the name of layer A?

Palisade mesophyll layer

ii. What is the main function of layer A?

Photosynthesis

iii. Explain the function of the spaces between the cells in layer B.

An explanation to include the following:

- Gas exchange / diffusion.
- Carbon dioxide can enter the cells for photosynthesis or so that oxygen can leave as a product of photosynthesis. Allow the converse if respiration is described.

iv. Name part C and explain its function.

Part C is a stoma. Accept stomata.**Function:** Allows gas exchange or allows water (vapour) to leave/transpiration.

v. Xerophytes are plants adapted to live in very dry conditions.

State **two** differences between the leaf structure of a typical xerophyte and the leaf structure shown in the figure above.**Any two of the following:**

- Leaf becomes a spine / reduced surface area.
- Stomata are sunk in pits / fewer stomata / smaller stomata.
- Guard cells / stomata close during the day.
- (waxy) cuticle is thicker.
- Leaf is rolled / curled leaves.

Anti diuretic hormone (ADH) affects the permeability of which organs?

The kidneys

Thyroxine is produced by which gland?

The thyroid gland

What effect does insulin have on cells of the liver?

Insulin causes the cells of the liver to take in excess glucose and store it as glycogen.