

Flower

3 Differentiate between the following pairs of term:

(a) Radicle and plumule.

Radicle

In a seed the radicle lies downward near the lower pointed end of the grain. It gives rise to root.

Plumule

In a seed the plumule lies upward near the cotyledon and gives rise to the shoot.

(b) Hilum and micropyle

Hilum

On one side of seed coat there is scar called hilum, which marks the place where seed was attached to the fruit wall.

micropyle

Above the hilum is a small pore called micropyle. The micropyle absorbs as much water as is required for the germination.

(c) Testa and tegmen

Testa

The seed is protected by a thick outermost coat called the testa or seed coat.

Tegmen

Under the testa lies a very thin membrane called the tegmen.

State one function of the following:

8 a Radicle = from the roots

b cotyledons = They contain stored food material which is used by the seedling for growth

c Endosperm - It store food in the form of starch

d Micropyle = Above the hilum is a small pore called micropyle. The micropyle absorb and allow as much water as it is required for germination.

9 The three condition necessary for germination of seeds are (tick the correct answer)

✓ a Oxygen, suitable temperature and water

b Good soil suitable temperature and light

c light, oxygen and temperature

d Oxygen, carbon dioxide, light (e) Good soil water and air.