

- 2) a) Pea
b) Corn seed
c) Bean seed
d) Bean seed

3) a) ans) The radicle develops into a root while the plumule develops into a shoot.

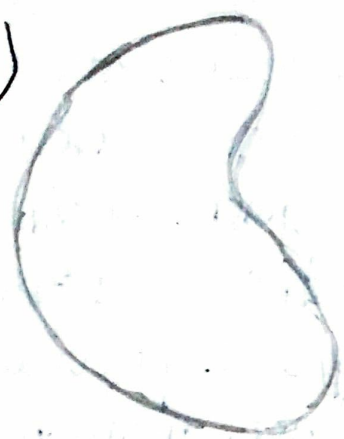
b) ans) Hilum is the inner concave side of the seed where the seed was attached to the fruit wall. Micropyle is a small pore which absorbs and allows water required for germination.

c) ans) Testa is the outer exposed part of the seed coat, whereas tegmen is a thin membrane and lies under the testa. It is the inner part of the seed coat.

4) ans) The two functions of fruit are:-
i) It protects the seed from the unfavourable environmental conditions.
ii) Fruits store food inside them.

- 10) a) Roots: Radicles
- b) Leaves: Plumule

11) ans)

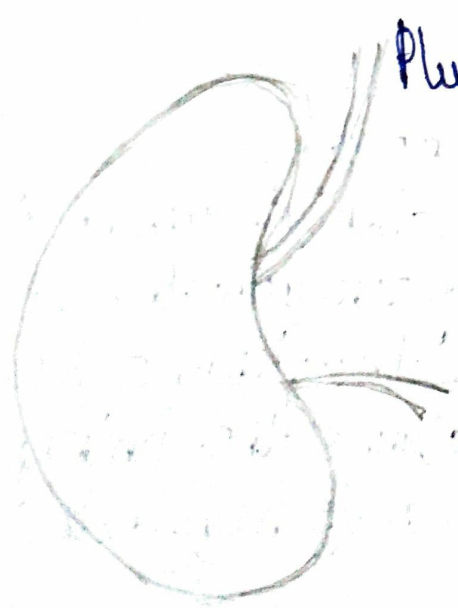


Complete seed



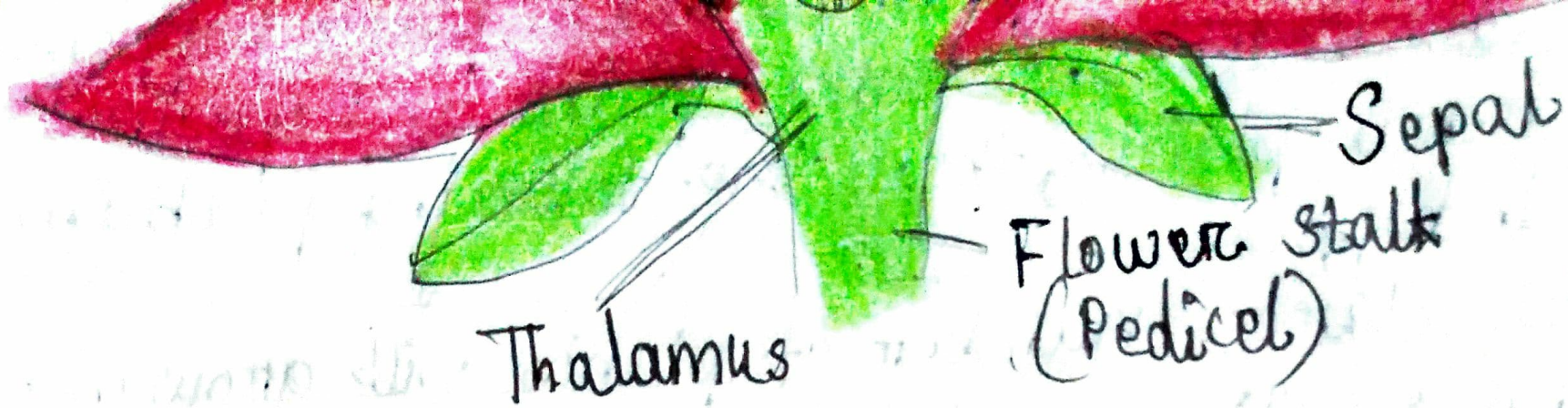
Radicle

Radicle emerged

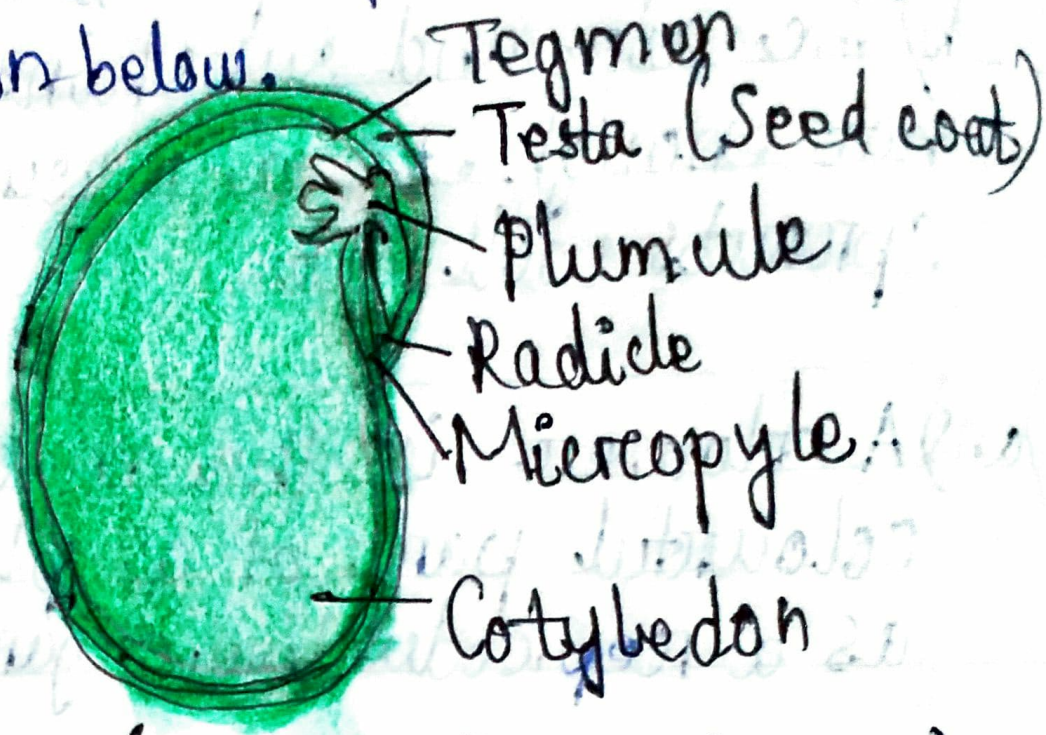
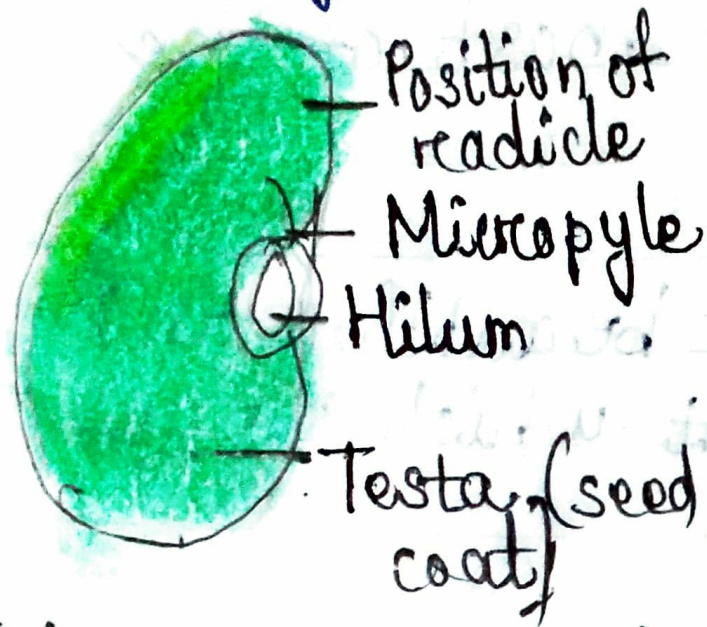


Plumule

Plumule emerged



4) ans) The bean seed is an example of a dicot seed, whose diagram is shown below.



(External appearance)

(Longitudinal Section)

The green outermost covering of the seed is called the seed coat. It protects the seed from insects and bacteria as well as from mechanical injury.

The seed coat is again made up of two parts. The outer exposed part is called the testa and the inner part is called tegmen.

A scar called hilum is present in the inner concave side of the seed. This is the place where the seed is attached to the fruit wall.

Above the hilum there is a small pore called micropyle. It absorbs and allows the seed ~~to~~ entry of water required for germination.

The seed is made up of two fleshy seed leaves called cotyledons.

They contain stored food material which is used by the seedling for growth.

In between the two cotyledons a delicate embryo is located, which consists of radicle and plumule. The radicle develops into a root and the plumule develops into a shoot.