3.) Differentiate between the following pairs of terms.

a.) Radicle and Plumule

The radicle develops a root while the plumule develops into a shoot.

b.) Hilum and Micropyle

Hilum is the inner concave of the seed where the seed was attached to the fruit wall. Micropyle is a small passage that allows water required for the germination.

c) Testa and tegmen

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.) The two functions of fruit are

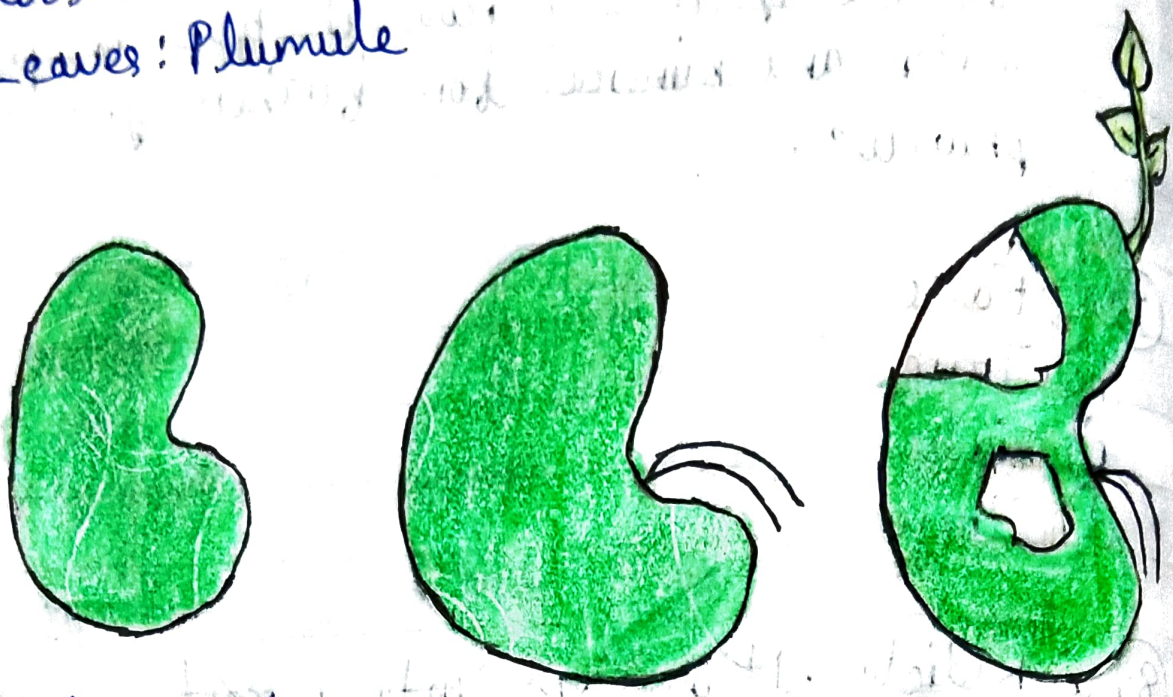
i) It protects the seed from the unfavorable environmental conditions.

ii) Fruits store food inside them.

(9.) The three conditions necessary for the germination of seeds are (✓ the correct ans)
(9.) a) ✓ - Oxygen, suitable temperature and water.

(10.) a) Roots: Radicles
b) Leaves: Plumule

(11.)



Complete seed | Radicle emerged | Plumule emerged

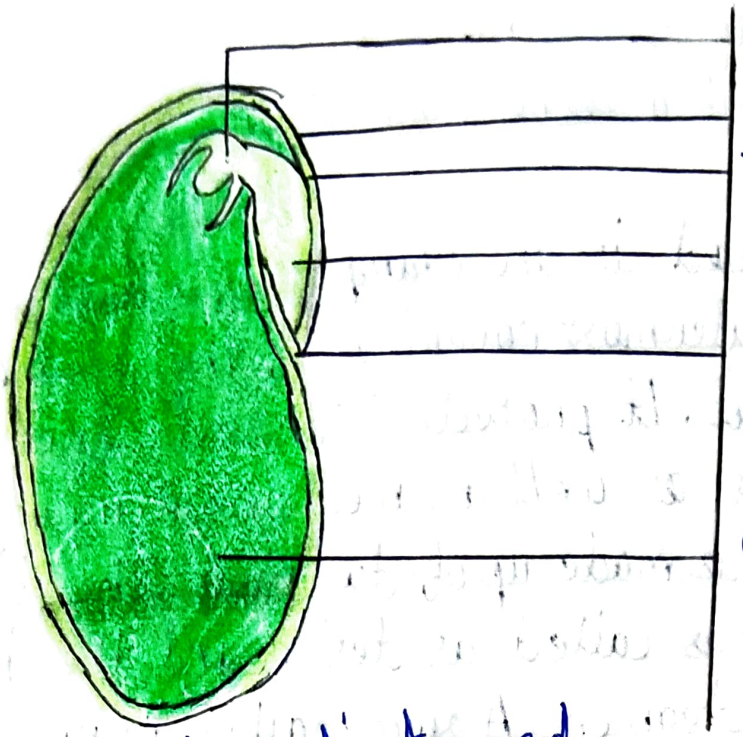
Long- answer questions

Date
Page

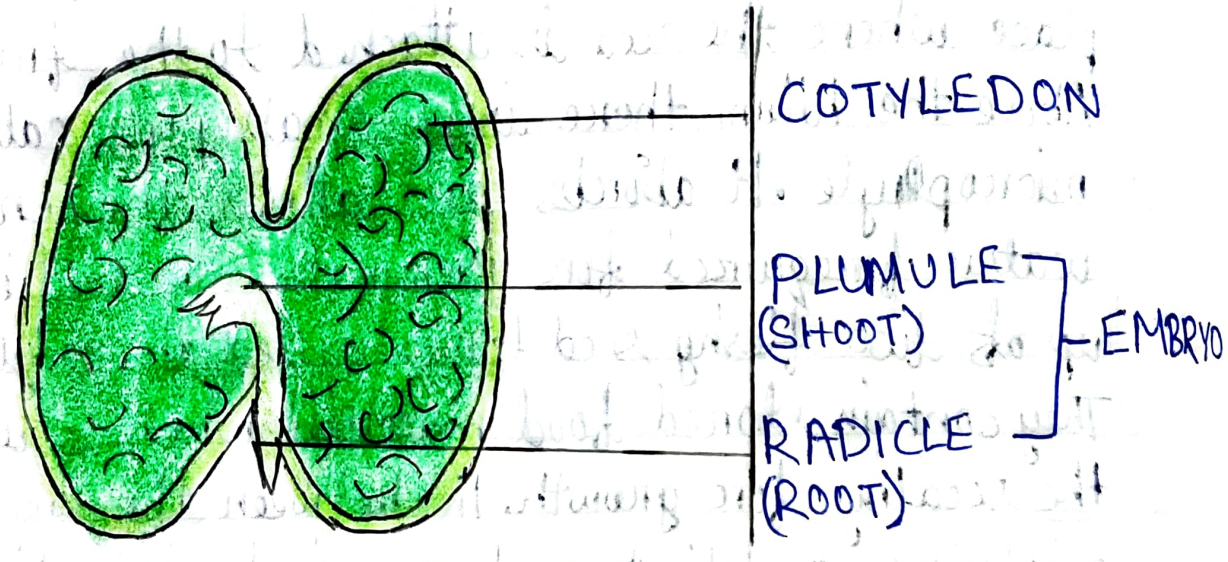
1) With the help of suitable diagram describe the structure of a dicot seed.

The bean seed is an example of a dicot seed. The green outermost covering of the seed is called the seed coat. It protects the seeds from insects and bacterias as well as mechanical injury. The seed coat is again is made up of two parts. The outer exposed part is called as testa and the inner part is called ~~as~~ 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 entry of water required for germination. The seed is made up of two fleshy seed leaves called the 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 is consist of radicle and plumule. The radicle develops into a root and the ~~plum~~ plumule develops into a shoot.

4.



Picture of a dicot seed



Picture of inside of a dicot seed