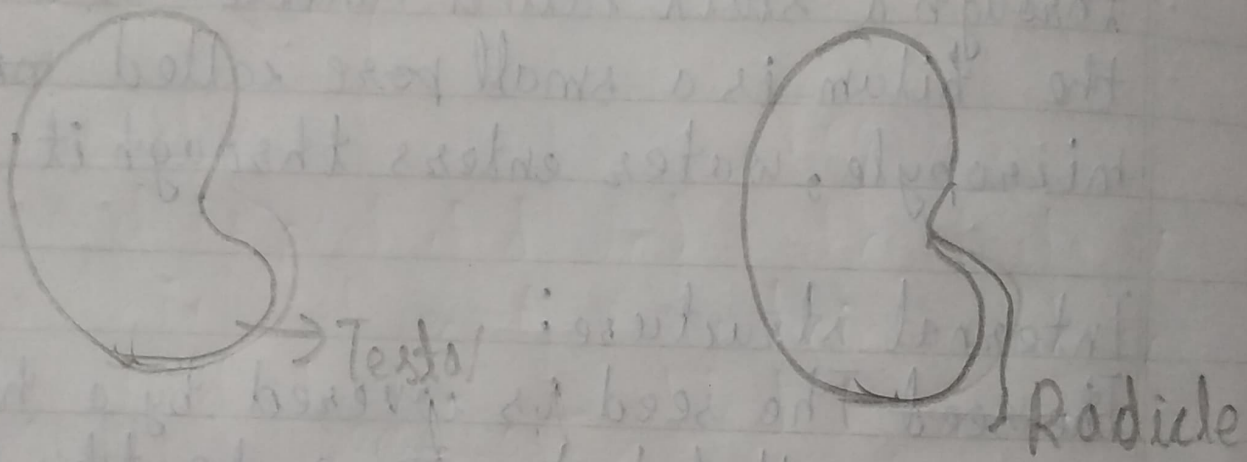
SHORT ANSWER QUESTIONS

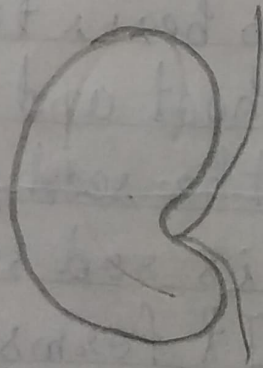
11. In the spaces provided below, draw labelled diagrams to show the three stages in the germination of any seed you have observed.

Ans→



COMPLETE SEED

RADICLE EMERGED



PLUMULE EMERGED

10) Name the part of the seed from which the following are given out:
a) Roots
b) Leaves

Ans) a) Roots: Radicle gives rise to roots
b) Leaves: Plumule gives rise to shoot bearing leaves

4) Give two functions of a fruit.

Ans. Functions of a fruit are:-
(i) It protects the seeds from the unfavourable enviromental conditions.
(ii) Fruits store food inside them.

3) Differenciate between the following pairs of terms
a) Radicle and Plumule.

a) Radicle	Plumule
In a seed the radicle lies downwards ~~and~~ which gives rise to the root.	In a seed the plumule lies upwards near the cotyledons and gives rise to the shoot.

b) Hilum and Micropyle.

Hilum	Micropyle
On one side of seed coat there is a scar ~~is~~ called hilum, marks the place where the seed was attached to the fruit wall.	Above the hilum is a small pore called micropyle which absorbs ~~oat~~ as much water required for germination.

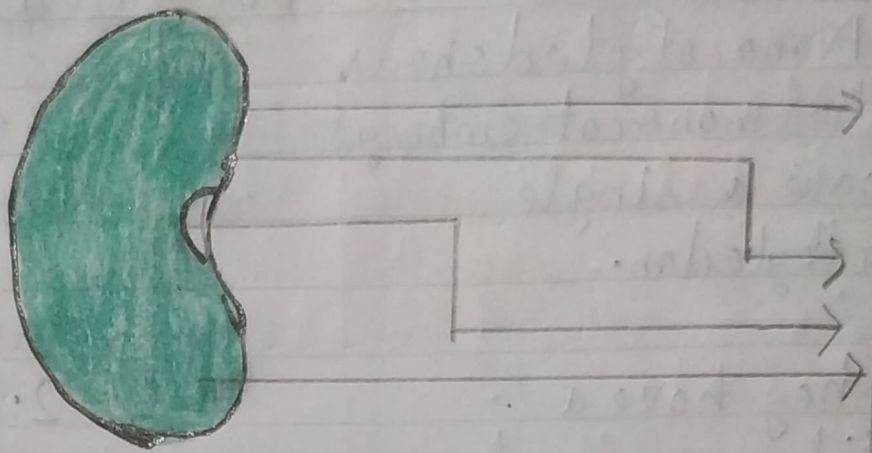
c) Testa and Tegmen

Testa	Tegmen
The seed is protected by a thick outermost coat called testa.	Under the testa lies a very thin membrane called tegmen.

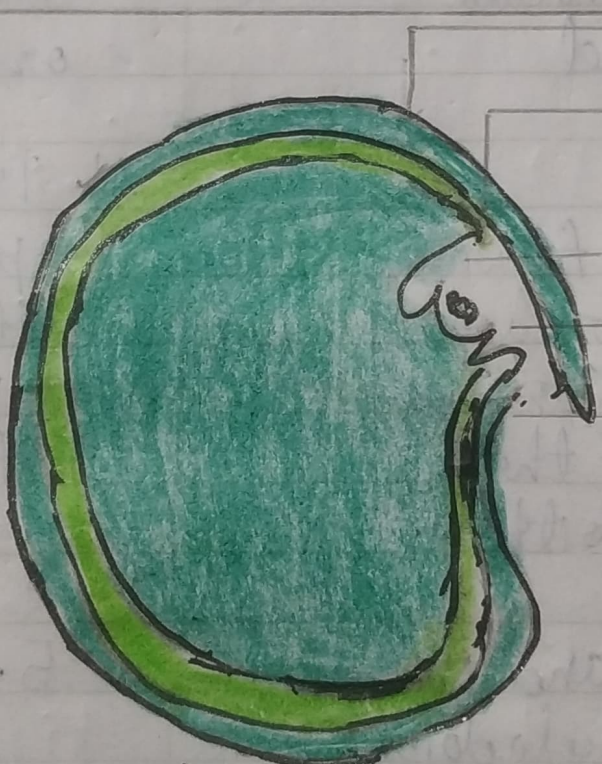
HW

Long Answer Questions

4) With the help of a suitable labelled diagram, describe the structure of a dicot seed.



(External Appearance)



(Longitudal Section)

Ans⇒ It is a dicotyledonous and non-endospermic seed. It is produced in a long cylindrical pod (fruit-phali).

External characters:

The seed is brown or whitish brown in colour. The seed is hard and kidney shaped ie. convex on one side and concave on other side. Concave side bears whitish scar called hilum. It is the place which is attached to the wall of the pod through a stalk called funicle. At one side of the hilum is a small pore called ~~micropyle~~ micropyle, water enters through it.

Internal structure:

~~The seed~~ The seed is covered by a hard, tough covering called testa. Inner to the testa is the embryo. Embryo consists of two cotyledons and embryo axis. Embryo axis has plumule and radicle. The plumule is present in between the two cotyledons and its top bears two folded tiny leaves. It forms future shoot and leaves of the growing seed. ~~When the seed grows the two cotyledons~~ Radicle is rod shaped and is out of the two cotyledons. It forms the root of the growing seed. When the seed grows the two

~~When the~~ cotyledons come out of the soil and form cotyledonary leaves and turn green in colour.