

Q) a) Radicle and plumule

Ans → Radicle is the embryonic root that emerge from the embryo. Radicle is the lower part of the embryo. Whereas the plumule develops into the shoot system. The Plumule is the upper part of the embryo.

b) Hilum and micropyle

Ans → On the inner ~~cone~~ concave side of the seed, there is a scar called

June							2020						
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June
2020

06

WK 23 (158-208) • Saturday

hilum, which marks the place where the seed was attached to the fruit wall. Whereas, above the hilum there is a small passage called microphyte. (micro = small, phyle = passage). The meaning of microphyte is small passage. The microphyte absorbs and allows sufficient amount of water to enter inside the cotyledon. It allows the entry of as much that is needed by the embryo to germinate.

c) Testa and Legumen

Ans → Testa is the outer hard part of the seed coat. It protects the embryo from mechanical injury and it also prevents the entry of parasites. The Legumen is the inner ~~part~~ thin membrane part of the

July
2020
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seed coat which lies just under the testa.

07

Sunday • WK 23 (159-207)

June
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4) Give two functions of a fruit.

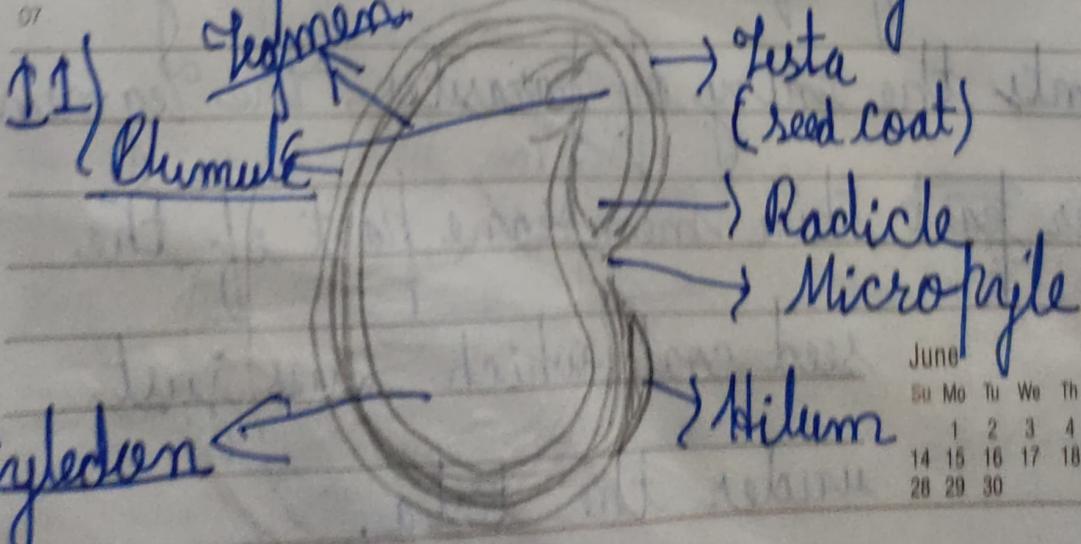
Ans → The two functions of a fruit are:

1) It protects seeds from the unfavorable environmental conditions. The fruits store food inside them.

2) Fruits help in dispersing the seeds present inside them and facilitate their germination.

10) Roots: The roots emerge from the Radicle that is present in the Embryo.

Leaves: The leaves emerge from the Plumule that is also present in the Embryo.



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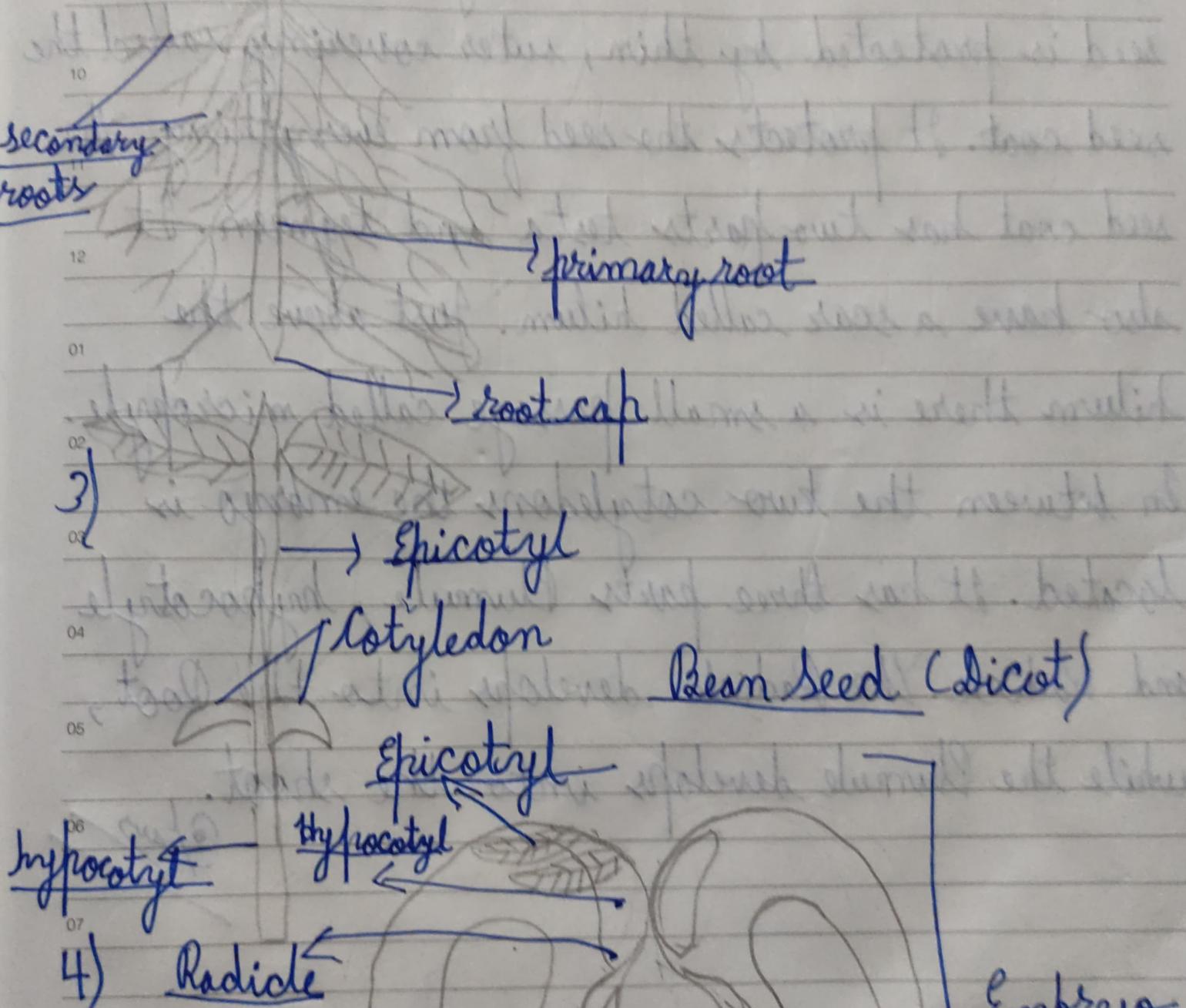
08

June

2020

WK 24 (160-206) • Monday

2)



July

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seed coat

Cotyledon

09

Tuesday • WK 24 (161-205)

June

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The dicot seed has two cotyledon. The bean seed is protected by thin, outer covering called the seed coat. It protects the seed from everything. The seed coat has two parts testa and tegmen. It also have a scar called hilum. Just above the hilum there is a small passage called micropyle. In between the two cotyledons the embryo is located. It has three parts Plumule, hypocotyle and Radicle. The Radicle develops into the Root, while the Plumule develops into the shoot.

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