

SUBJECT : BIOLOGY

CLASS : 6

CHAPTER 1 : DIVERSITY IN THE LIVING WORLD

5 NCERT FOLDER

I VERY SHORT ANSWER TYPE QUESTIONS

1) What is leaf Venation? Name its two types with one example each. (T.BK.Q 7)

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Ans: Leaf venation is the arrangement of veins in a leaf. The two types of leaf venation are:

1) Parallel venation — veins run parallel to each other. Example: Banana leaf

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2) Reticulate venation — veins form a net-like pattern. Example: Mango leaf.

2) Give two examples of behavioural adaptations (eg., migration, hibernation, aestivation, nocturnal activity). (T.BK.Q 16)

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Ans:- * Migration: Birds move to warmer places during winter.

* Hibernation — Bears sleep for a long time during winter to save energy.

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* Aestivation — Snails remain inactive during hot summer to avoid heat and water loss.

* Nocturnal activity — Owls are active at night and rest during the day.

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II SHORT ANSWER TYPE QUESTIONS

1) State the roles of testa, tegmen, hilum and micropyle in a seed (any three). (T.BK.Q 6)

Ans:-

- 1) Testa - Outer protective covering of the seed.
- 2) Tegmen - Inner protective layer of the seed coat.
- 3) Hilum - Scar showing where the seed was attached to the fruit.
- 4) Micropyle - Tiny pore through which water enters the seed during germination.

- 2) List three key features of a monocot seed (endosperm, Scutellum, coleoptile/coleorrhiza) with one cereal example. (T.BK. Q 7)

Ans:-

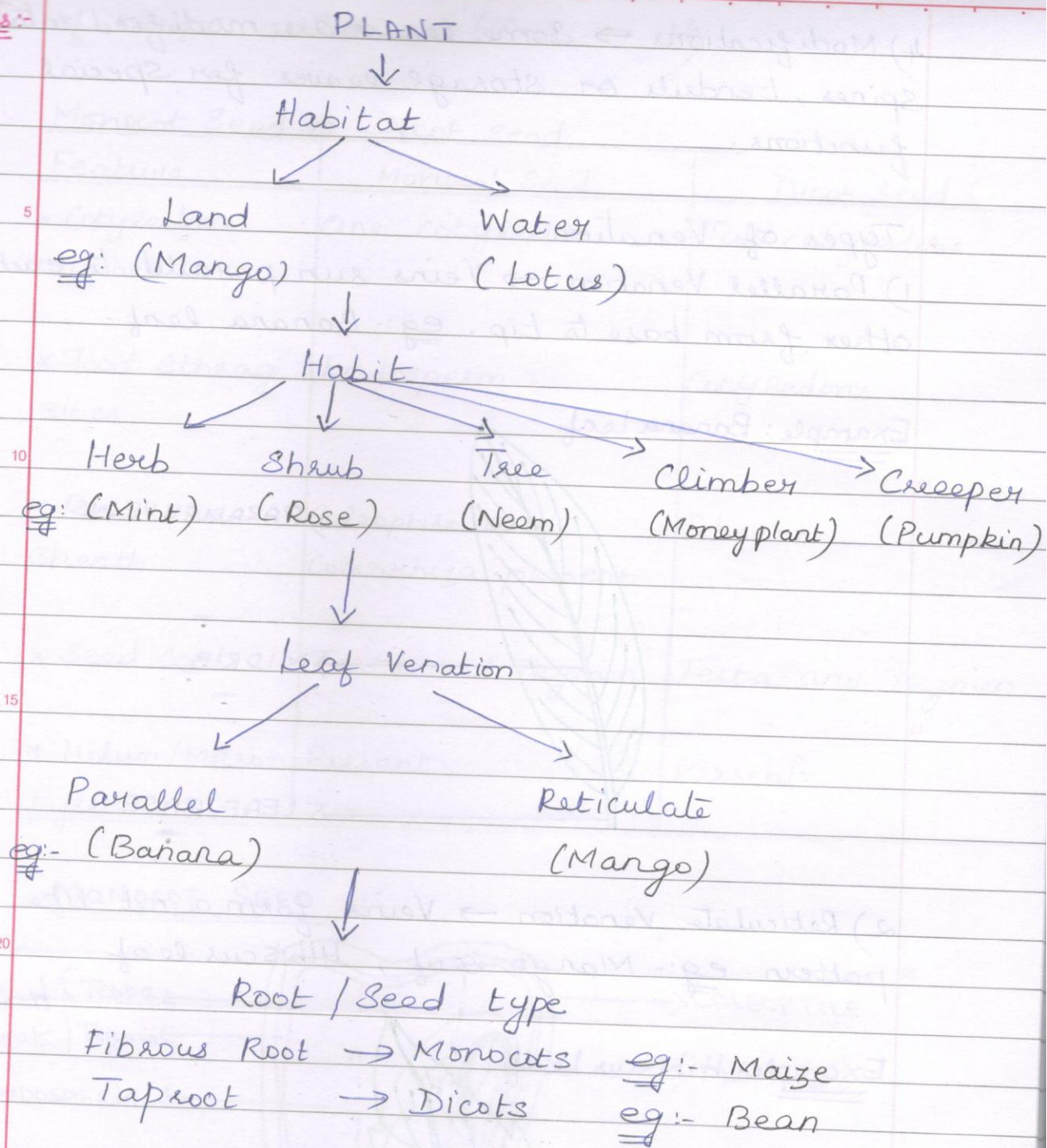
- 1) Endosperm - Stores food for the baby plant.
 - 2) Scutellum - Single cotyledon that absorbs food from the endosperm.
 - 3) Coleoptile and Coleorrhiza - Protective sheaths for the young shoot and root.
- Example of a Monocot cereal - Maize.

III

LONG ANSWER TYPE QUESTIONS

- 1) Describe a step by step method to group plants (scientifically) flow chart : habitat → habit → Leaf Venation → root/seed type. Add two examples. (T.BK. Q 2)

Ans:-



2) ²⁵ Leaf: functions (photosynthesis, transpiration, gaseous exchange, modifications) and types of venation. Add labelled sketches of parallel and reticulate venation. (T.BK.Q 4)

Ans:- ³⁰

Leaf functions :-

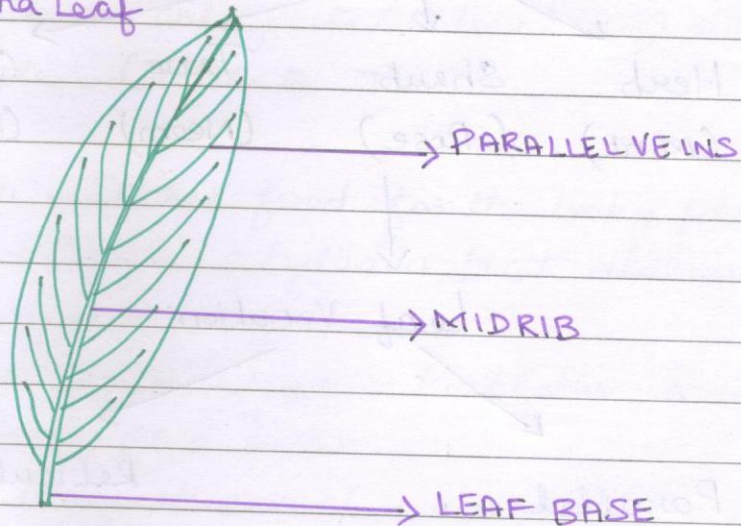
- 1) Photosynthesis → leaves prepare for the plant using sunlight
- 2) Transpiration → Lose excess water as water vapor.
- 3) Gaseous Exchange → Exchange Oxygen and carbon dioxide through stomata.

4) Modifications → Some leaves are modified into spines, tendrils or storage leaves for special functions.

5) Types of Venation

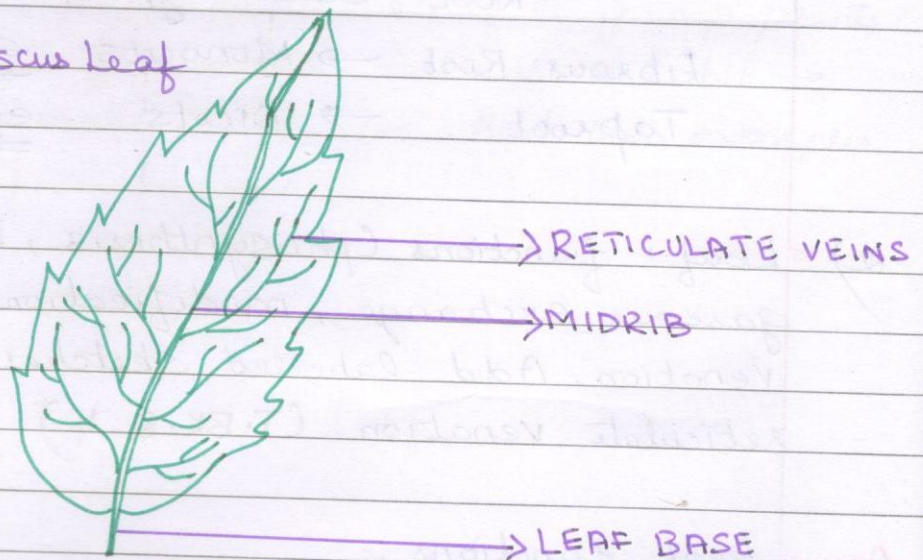
1) Parallel Venation → Veins run parallel to each other from base to tip. eg:- Banana leaf.

Example: Banana Leaf



2) Reticulate Venation → Veins form a net-like pattern. eg:- Mango leaf, Hibiscus leaf

Example: Hibiscus Leaf



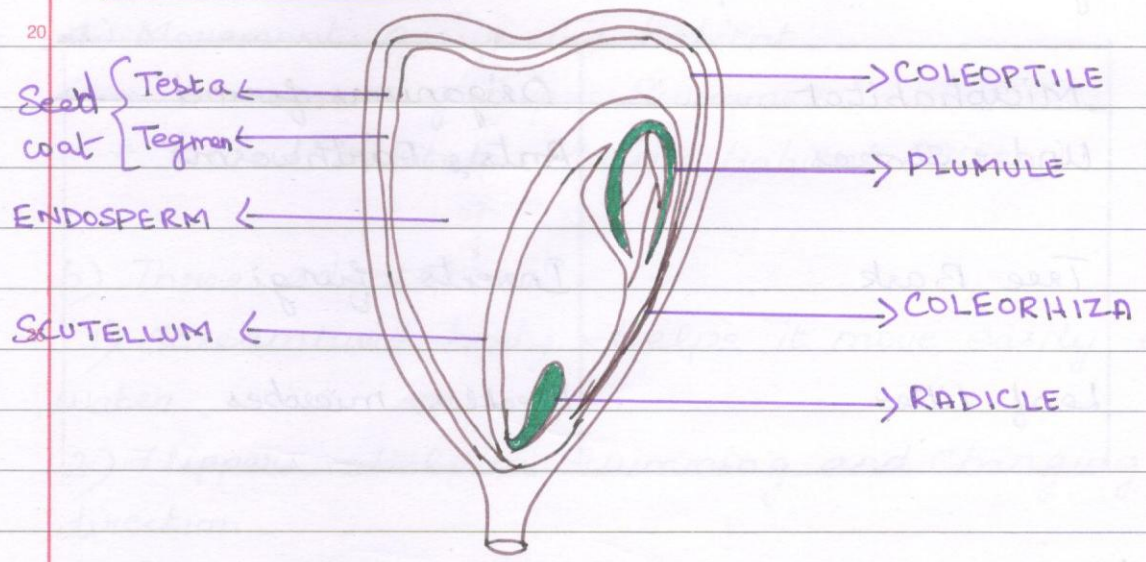
3) Seeds : compare monocot vs dicot seeds - food storage site, cotyledon number, protective sheaths, (coleoptile/coleorhiza), seed coat parts (testa/tegmen), hilum/micropyle. Add neat outline diagrams

of maize and bean. (T.BK.Q 6)

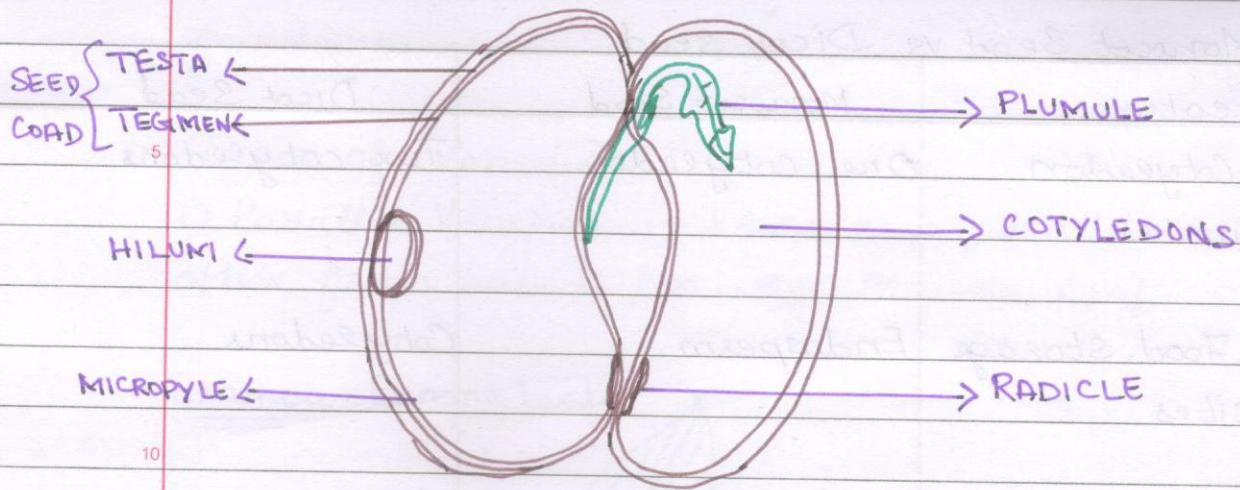
Ans: Monocot Seed vs Dicot seed

Feature	Monocot Seed	Dicot Seed
* Cotyledon number	One cotyledon	Two cotyledons
* Food Storage sites	Endosperm	Cotyledons
* Protective Sheath	Coleoptile and Coleorhiza present	Absent
* Seed Coat	Testa and Tegmen	Testa and Tegmen
* Hilum/Micropyle	Present	Present

MONOCOT SEED



DICOT SEED



- 4) What are microhabitats? Explain their importance for biodiversity; give three microhabitat examples and the organisms found there. (T.BK Q 14)

Ans:-

Microhabitats are small places where tiny living organisms live. They are important because they provide food, water, moisture and shelter for many organisms and help increase biodiversity.

Microhabitat	Organisms found
Under Stones	Ants, Earthworms
Tree Bark	Insects, fungi
Leaf litter	Beetles, microbes

- 5) Human impact and solutions: Causes of habitat loss (Deforestation, pollution, climate change), and two consequences, and a 3-point action plan for your school / community to protect habitats. (T.BK.Q. 15)

Ans:-

Human Impact and Solutions
Causes of Habitat Loss

- 1) Deforestation 2) Pollution 3) Climate change.

Two consequences

- 1) Animals lose shelter and food.
- 2) Animals and plants may disappear.

3- Point action plan

- 1) Plant more trees
- 2) Keep surroundings clean
- 3) Save water and avoid plastic.

6) Application question: An unknown animal has a streamlined body, flippers, and breathes air, it lives in the ocean but must surface often.

a) Into which movement group and broad habitat would you place it?

b) Name three adaptations that support your choice and explain each. (T.BK.Q 16)

Ans:-

a) Movement group and habitat

* Movement group: Swimmer

* Broad habitat: Marine habitat (Ocean)

b) Three adaptations

1) Streamlined body - Helps it move easily in water.

2) Flippers - Help in swimming and changing direction.

3) Breathes air with lungs - So it comes to the water surface often to breathe.

Example: Dolphin or Whale.

I. VERY SHORT ANSWER TYPE

Q 1 = Pg No. 1.1

Q 2 = Pg No. 1.1

Q 3 = Pg No. 1.2

Q 4 = Pg No. 1.3

Q 5 = Pg No. 1.4

Q 6 = Pg No. 1.4

Q 8 = Pg No. 1.5

Q 9 = Pg No. 1.5

Q 10 = Pg No. 1.5

Q 11 = Pg No. 1.5

Q 12 = Pg No. 1.11

Q 13 = Pg No. 1.11

Q 14 = Pg No. 1.11

Q 15 = Pg No. 1.11

II. SHORT ANSWER TYPE

Q 1 = Pg No. 1.9

Q 2 = Pg No. 1.2 & 1.3

Q 3 = Pg No. 1.3

Q 4 = Pg No. 1.4

Q 5 = Pg No. 1.5

Q 8 = Pg No. 1.6

Q 9 = Pg No. 1.12

Q 10 = Pg No. 1.13

Q 11 = Pg No. 1.12

Q 12 = Pg No. 1.12

Q 13 = Pg No. 1.11 & 1.12

Q 14 = Pg No. 1.12

Q 15 = Pg No. 1.13

Q 16 = Pg No. 1.13

III · LONG ANSWER TYPE

Q 1 = Pg No 1.1

Q 3 = Pg No. 1.2 + 1.3

Q 5 = Pg No. 1.5

Q 7 = Pg No. 1.9 + 1.10

Q 8 = Pg No. 1.11 + 1.12

Q 9 = Pg No. 1.11

Q 10 = Pg No. 1.11 + 1.12

Q 11 = Pg No. 1.12 + 1.13

Q 12 = Pg No. 1.13

Q 13 = Pg No. 1.13 + CLASS NOTES VERY

SHORT ANSWER 2