

Morphology of Flowering Plants — Assignment 1

Class 11 Biology · Topic-wise question bank covering every concept of the chapter · Narayan Gurukul Academy

Instructions: (1) Attempt all questions. This worksheet walks through every concept of the chapter, topic by topic.
(2) The interactive MCQ version of these questions (with instant answer reveal) is available on the notes page.
(3) Universal values: $g = 10 \text{ m/s}^2$ unless stated. Give answers with correct SI units.

Root System

MCQ Questions (choose the correct option)

- The root system that develops from the radicle is the
 - tap root system
 - fibrous root system
 - adventitious system
 - aerial system
- Roots that arise from parts other than the radicle are
 - adventitious roots
 - tap roots
 - primary roots
 - lateral roots
- Pneumatophores are found in
 - mangrove plants
 - desert plants
 - epiphytes
 - aquatic plants
- The region of the root where cells divide is the
 - region of meristematic activity
 - region of elongation
 - region of maturation
 - root cap

1 Mark Questions

- What is a tap root system?
- Name one plant with a fibrous root system.
- What are pneumatophores?

2 Mark Questions

- Distinguish between tap root and fibrous root systems.
- What are adventitious roots? Give two examples.

3 Mark Questions

- Describe the regions of a root.
- Explain the modifications of roots for storage and support.

Stem

MCQ Questions (choose the correct option)

1. The stem develops from the
 - (A) plumule
 - (B) radicle
 - (C) cotyledon
 - (D) root cap
2. Underground stems are seen in
 - (A) potato and ginger
 - (B) pea and bean
 - (C) carrot and radish
 - (D) none of these
3. Nodes and internodes are found on the
 - (A) stem
 - (B) root
 - (C) leaf
 - (D) flower
4. Tendrils of a pea are modified
 - (A) leaves
 - (B) stems
 - (C) roots
 - (D) flowers

1 Mark Questions

1. What is a node?
2. Name one plant with an underground stem.
3. What is a tendril?

2 Mark Questions

1. State two functions of the stem.
2. Distinguish between a stem and a root.

3 Mark Questions

1. Describe the modifications of stems.
2. Explain the aerial modifications of stems with examples.

Leaf

MCQ Questions (choose the correct option)

1. The flat green part of the leaf is the
 - (A) lamina
 - (B) petiole
 - (C) stipule
 - (D) vein
2. The arrangement of veins in a leaf is called

- (A) venation
 - (B) phyllotaxy
 - (C) aestivation
 - (D) plication
3. Reticulate venation is characteristic of
- (A) dicots
 - (B) monocots
 - (C) bryophytes
 - (D) gymnosperms
4. Pitcher plant leaves are modified for
- (A) catching insects
 - (B) storage
 - (C) support
 - (D) photosynthesis

1 Mark Questions

1. What is the lamina?
2. What is phyllotaxy?
3. Name one insectivorous plant.

2 Mark Questions

1. Distinguish between reticulate and parallel venation.
2. What is a compound leaf?

3 Mark Questions

1. Describe the parts of a typical leaf.
2. Explain the modifications of leaves for different functions.

The Flower

MCQ Questions (choose the correct option)

1. The flower is a modified
 - (A) shoot
 - (B) root
 - (C) leaf
 - (D) stem branch
2. The outermost whorl of the flower is the
 - (A) calyx
 - (B) corolla
 - (C) androecium
 - (D) gynoecium
3. The male reproductive whorl is the
 - (A) androecium
 - (B) gynoecium
 - (C) corolla

- (D) calyx
4. The arrangement of ovules within the ovary is
- (A) placentation
 - (B) aestivation
 - (C) phyllotaxy
 - (D) veneration

1 Mark Questions

1. What is a complete flower?
2. What is placentation?
3. What is the androecium?

2 Mark Questions

1. Distinguish between a complete and an incomplete flower.
2. What is the difference between aestivation and placentation?

3 Mark Questions

1. Describe the parts of a typical flower.
2. Explain the types of placentation with examples.

Fruit and Seed

MCQ Questions (choose the correct option)

1. The fruit develops from the
 - (A) ovary
 - (B) ovule
 - (C) stamen
 - (D) sepal
2. The seed develops from the
 - (A) ovule
 - (B) ovary
 - (C) stigma
 - (D) style
3. A fruit formed without fertilisation is
 - (A) parthenocarpic
 - (B) aggregate
 - (C) false
 - (D) composite
4. The outer protective covering of a seed is the
 - (A) seed coat
 - (B) cotyledon
 - (C) embryo
 - (D) endosperm

1 Mark Questions

1. What is a fruit?
2. What is parthenocarpy?
3. Name the parts of a seed.

2 Mark Questions

1. Distinguish between a true fruit and a false fruit.
2. What is the difference between monocot and dicot seeds?

3 Mark Questions

1. Describe the structure of a typical seed.
2. Explain the types of fruits with examples.

Major Families — Fabaceae, Solanaceae, Liliaceae

MCQ Questions (choose the correct option)

1. Fabaceae is characterised by
 - (A) legume fruit
 - (B) capsule fruit
 - (C) siliqua
 - (D) follicle
2. Solanaceae includes
 - (A) tomato and potato
 - (B) pea and bean
 - (C) onion and garlic
 - (D) wheat and rice
3. Liliaceae has
 - (A) a superior ovary
 - (B) an inferior ovary
 - (C) no ovary
 - (D) multiple ovaries
4. The floral formula of Fabaceae includes
 - (A) $\% \text{ and } k(5)$
 - (B) $\bullet \text{ and } k5$
 - (C) you cannot say
 - (D) none

1 Mark Questions

1. Name the family of pea.
2. Give the fruit type of Liliaceae.
3. Name one plant of the family Solanaceae.

2 Mark Questions

1. Give the floral formula of Fabaceae.
2. State two features of Liliaceae.

3 Mark Questions

1. Describe the floral characters of the family Fabaceae.
2. Describe the floral characters of the family Solanaceae and Liliaceae.