# Morphology of Flowering Plants

I. Select the correct answer from the following questions:

Question 1.
Which one of the following is not a characteristic of root?
(a) Absence of buds
(b) Presence of chlorophyll
(c) Presence of root cap
(d) Presence of Unicellular hair

▼ Answer

Answer: (b) Presence of chlorophyll

---

Question 2.
Roots that grow from any part of the plant body other than the radicle are called
(a) Tap roots
(b) Adventitious roots
(c) Modified roots
(d) Aerial roots

▼ Answer

Answer: (b) Adventitious roots.

---

Question 3.
The place on stem or branch form where one or more leaves arise is called
(a) Apex
(b) Bud
(c) Internode
(d) Node

▼ Answer

Answer: (d) Node

---

Question 4.
Which one of the following underground, fleshy structure is a stem?
(a) Carrot
(b) Potato
(c) Turnip
(d) Sweet Potato

▼ Answer

Answer: (b) Potato

---

Question 5.
Phyllode is a modification of
(a) Root
(b) Flower
(c) Petiole
(d) Bud

▼ Answer

Answer: (c) Petiole

---

Question 6.
Potato tubers are formed at the tips of
(a) Primary roots
(b) Adventitious roots
(c) Petiole
(d) Stolons

▼ Answer

Answer: (d) Stolons

---

Question 7.
Mesocarp and endocarp is the edible part of the fruit of
(a) Apple
(b) Mango
(c) Banana
(d) Litchi

▼ Answer

Answer: (c) Banana

---

Question 8.
Drupe is recognised by
(a) Stomy mesocarp
(b) Fleshy seed coat
(c) Thin seed coat
(d) Stony endocarp

▼ Answer

Answer: (d) Stony endocarp

---

Question 9.
What do you eat in coconut?
(a) Mesocarp
(b) Fruit wall
(c) Entire seed
(d) Embryo

▼ Answer

Answer: (c) Entire seed

---

Question 10.
The positions of shoot apex in monocot embryo is
(a) Lateral
(b) Basal
(c) Sub-terminal
(d) Terminal

▼ Answer

Answer: (a) Lateral

---

Question 11.
In which one of the following plants the oil is stored in endosperm
(a) Coconut
(b) Ground nut
(c) Seasame
(d) Soyabean

▼ Answer

Answer: (a) Coconut

---

Question 12.
In maize, the flower are
(a) Bisexual
(b) Unisexual but on the same plant
(c) Absent
(d) Unisexual but on different plants

▼ Answer

Answer: (b) Unisexual but on the same plant

---

Question 13.
Epipetalous is condition of
(a) Aestivation of petal
(b) Placentation
(c) Stamens
(d) Position of ovary

▼ Answer

Answer: (c) Stamens

---

Question 14.
A characteristic of angiosperm is

(a) Flower
(b) Root
(c) Seed
(d) All of these

▼ Answer

Answer: (d) All of these

---

Question 15.
An aspect of flower shown in floral formula but not in floral diagram is
(a) Aestivation
(b) Floral symmestry
(c) Position of ovary
(d) Cohesion of floral parts

▼ Answer

Answer: (c) Position of ovary

---

Question 16.
In grass and banyan tree these are roots arising from parts of the plant other than the radicle, these are called
(a) Adventitious roots
(b) Fibrous root system
(c) Tap root system
(d) Tertiary root system

▼ Answer

Answer: (a) Adventitious roots

---

Question 17.
In some leguminous plants the leaf base may become swollen, which is called the
(a) Pulvinus
(b) Lamina
(c) Petiole
(d) Leaf base

▼ Answer

Answer: (a) Pulvinus

---

Question 18.
The arrangement of flowers on the floral axis is termed as
(a) Inflorescence
(b) racemose
(c) cymose
(d) thalamus

▼ Answer

Answer: (a) Inflorescence.

---

Question 19.
When the floral appendages are in multiple of 3,4 or 5 respec¬tively, a flower may be
(a) Trimerous
(b) Teramerous
(c) Pentamerous
(d) All of these types

▼ Answer

Answer: (d) All of these types

---

Question 20.
A sterile stamen is called
(a) Staminode
(b) Stigma
(c) Apocarpous
(d) Syncarpous

▼ Answer

Answer: (a) Staminode

---

## II. Fill in the blanks

Question 1.
Solanaceae is a large family, commonly called as the '……'

▼ Answer

Answer: Potato family

---

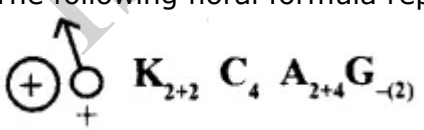
Question 2.
Fabaceae family was earlier called ……, a sub family of family …….

▼ Answer

Answer: Papilonoideae, Leguminosae

---

Question 3.
The following floral formula represents the …… (Family: Brassicaceae)




▼ Answer

Answer: mustard plant

---

Question 4.
In the floral formula, 'K' for ……. 'P' for …….. 'A' for ……

▼ Answer

Answer: calyx, perianth, androecium

---

Question 5.
The outer covering of endosperm separates the embryo by a layer called ……..

▼ Answer

Answer: aleurone layer

---

Question 6.
The embryo consists of one large and shield shaped cotyledon known as ……. and a short axis with a …… and a radicle

▼ Answer

Answer: scutellum, Plumule

---

Question 7.
Above the hilum, is a small pore called the ……..

▼ Answer

Answer: Micropyle

---

Question 8.
If a fruit is formed without fertilisation of the ovary, it ……

▼ Answer

Answer: Parthenocarpic fruit.

---

Question 9.
The calyx is the outer most whorl of the flower and members are called ……

▼ Answer

Answer: Sepals

---

Question 10.
If gynoecium is situated in the centre and other parts of the flower are located on the rim of the thalamus almost at the same level, it is called ……

▼ Answer

Answer: Perigynous

Question 11.
Flowers with bracts, reduced, leaf found in flower are called ……. and those without bracts, ……

▼ Answer

Answer: bracteate, ebracteate.

---

Question 12.
In symmetry, the flower may be ……. or ……

▼ Answer

Answer: actinomorphic (regular), zymomorphic (bilateral)

---

Question 13.
A flower having only stamens or carpel is ……

▼ Answer

Answer: unisexual

---

Question 14.
…….. is the pattern of arrangement of leaves on the stem or branch.

▼ Answer

Answer: Phvllotaxy

---

Question 15.
When the incisions of the lamina reach up to the midrib breaking it into a number of leaflets, the leaf is called ……

▼ Answer

Answer: compound

---

## III. Mark the statements True (T) or False (F):

Question 1.
The study of external features of plants is known as external morpholgy and that of internal features as anatomy.

▼ Answer

Answer: True

---

Question 2.
The knowledge of external morpholgy of flowering plants is not essential for the study of all

branches of botany.

▼ Answer

Answer: False

---

Question 3.
The root is covered at the apex by a thimble-like structure called the not cap

▼ Answer

Answer: True

---

Question 4.
A few millimetre above the root cap is the region of meristematic activity.

▼ Answer

Answer: True

---

Question 5.
Tap roots of carrot, turnip and adventitious roots of sweet potato, get swollen and store food.

▼ Answer

Answer: True

---

Question 6.
The main function of the stem is spreading out branches bearing leaves, flowers and fruits. It conducts water, minerals and photosynthates.

▼ Answer

Answer: True

---

Question 7.
Underground stems of potato, ginger, turmeric, zaminkand modify to store food in them.

▼ Answer

Answer: True

---

Question 8.
A typical leaf consists of three main parts: Leaf base, petiole and lamina.

▼ Answer

Answer: True

---

Question 9.
In some leguminous plants the leafbase may become swollen, which is called the pulvinus.

▼ Answer

Answer: True

---

Question 10.
The lamina or the leaf blade is the green expanded part of the leaf with veins and veinlets.

▼ Answer

Answer: True

---

Question 11.
Veins provide rigidity to the leaf blade and act as channels of transport for water, minerals and food materials.

▼ Answer

Answer: True

---

Question 12.
Leaves are often modified to perform functions other than photosynthesis. They are converted into tendrils for climbing as in peas, or into spines for defence as in cacti.

▼ Answer

Answer: True

---

Question 13.
Calyx and corolla are accessory organs, while androecium and gynoecium are reproductive organs.

▼ Answer

Answer: True

---

Question 14.
When a flower has both androecium and gynoecium, it is termed as bisexual.

▼ Answer

Answer: True

---

Question 15.
A flower is asymmetric or irregular, if it cannot be divided into similar halves by any vertical plane passing through the centre as in canna.

▼ Answer

Answer: True

---

IV. Match the items of Column I

| Column I | Column II |
|---|---|
| (a) External features of plants | 1. Pneumatophores |
| (b) Internal features of plants | 2. such as citrus, bongainvillea |
| (c) The stems of maize and sugar cane have supporting roots coming out of the lower portion of | 3. between two nodes. |
| (d) The primary roots and its branches constitute the | 4. external morphology |
| (e) Help to get oxygen for respiration | 5. Pulvinus |
| (f) Internodes are the portions | 6. silk cotton |
| (g) Thorns are found in many plants | 7. reproductive organs. |
| (h) Some leguminous plants the leaf-base may become swollen | 8. calyx, corolla, androecium and gynoecium |
| (i) The leaflets are attached at a common points i.e. at the tip of petiole as in | 9. petals |
| (j) Androecium and gynoecium are | 10. Fabaceae |
| (k) Each flower normally has four floral whorls viz. | 11. information about the the number of parts of a flower |
| (l) Corolla is composed of | 12. as in china rose, mustard and sun flower plants. |
| (m) $\%\,\mathrm{Q}\,\mathrm{K}_5\,\mathrm{C}_{1+2+(2)}\,\mathrm{A}_{(9)}+_{+1}\,\mathrm{G}_1$ | 13. stilt roots |
| (n) A floral diagram provides | 14. Tap root system |
| (o) In alternate type of phyllotaxy, a single leaf arises at each node in alternate manner. | 15. anatomy |

▼ Answer

Answer:
(a) → 4
(b) → 15
(c) →13
(d) → 14
(e) → 1
(f) → 3
(g) → 2
(h) → 5
(i) → 6
(j) → 7
(k) → 8
(l) → 9
(m) → 10

(n) → 11
(o) → 12

---