# PRACTICE QUESTIONS
# FOR
# SELF EVALUATION
# FROM
# FLOWER
# AND
# POLLINATION & FERTILISATION

1. Name:

(*i*) A condition in which the petals are free.

(*ii*) A plant with nectaries.

(*iii*) A monoecious plant.

(*iv*) The male reproductive part of a flower.

2. Complete the following:

(*i*) A pistil with many carpels is called _____ .

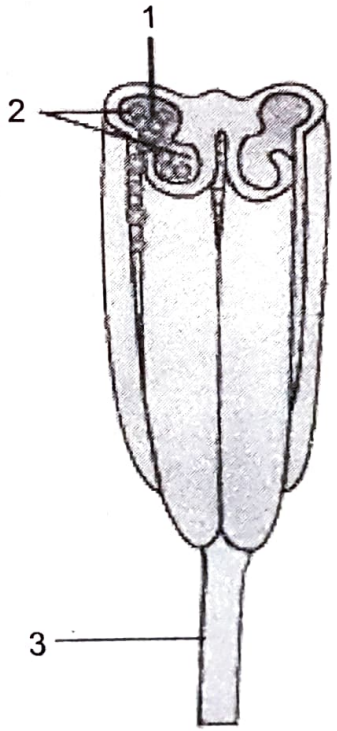
(*ii*) Bract is present in _____ .

(*iii*) A tissue that attaches ovules on the ovary wall is _____ .

3. Explain:

(*i*) Pistillate flower (*ii*) Nectaries (*iii*) Sepaloid perianth.

4. The figure shows a particular structure of a flower.




(*i*) Identify it.

(*ii*) State the function of it.

(*iii*) Label the parts 1–3.

**5.** Choose the correct option from the brackets

(*i*) an incomplete flower (pea, bean, cucumber, *hibiscus*)

(*ii*) a pistil with many carpels (monocarpellary, polycarpellary, bicarpellary, pentacarpellary)

(*iii*) the floral whorl outside the sepal (calyx, corolla, epicalyx, androecium)

(*iv*) the stalk of the flower (pedicel, perianth, placenta, thalamus).

**6.** State the differences between the following:

(*i*) fruit and seed.

(*ii*) actinomorphic and zygomorphic flower.

(*iii*) gamosepalous and polysepalous.

7. Write the technical term for the following:

(*i*) the arrangement of ovules on the wall of the ovary.

(*ii*) The condition of free stamens.

(*iii*) Collection of carpels.

(*iv*) Undifferentiated sepal and petal.

**8.** State the function of the following:

(*i*) placenta (*ii*) style (*iii*) anther (*iv*) sepals

**9.** State whether the following are true or false.

(*i*) Androecium is the male part of the flower.

(*ii*) In hypogynous flower, the thalamus encloses the ovary.

(*iii*) A complete flower has four or five whorls.

(*iv*) Bean is a monoecious plant

**10.** Give reasons:

(*i*) Some plants have nectaries.

(*ii*) Petals are brightly coloured.

## Level 1

1. **State whether the following are True or False.**
   - (*i*) Petaloid perianth is brightly coloured.
   - (*ii*) Anther produces ovule.
   - (*iii*) Nectaries produces mucus.
   - (*iv*) Androecium is the male part of a flower.
2. **Find the odd one out:**
   - (*i*) Ovary, stigma, filament, style.
   - (*ii*) Monoadelphous, monoecious, diadelphous, polyadelphous.
3. **Name:**
   - (*i*) The first whorl of a flower.
   - (*ii*) A group of flowers on a twig.
   - (*iii*) The tissue that helps to attach ovules on the ovary.
   - (*iv*) A condition in which ovary is inferior.
   - (*v*) Fused sepals.

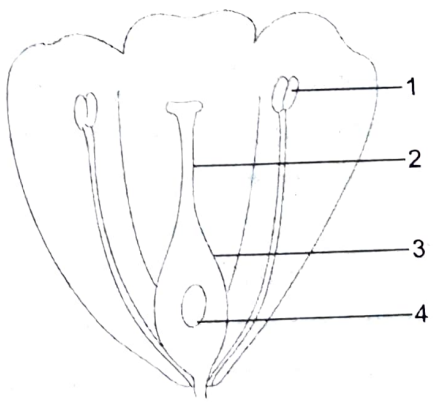
## Level 2

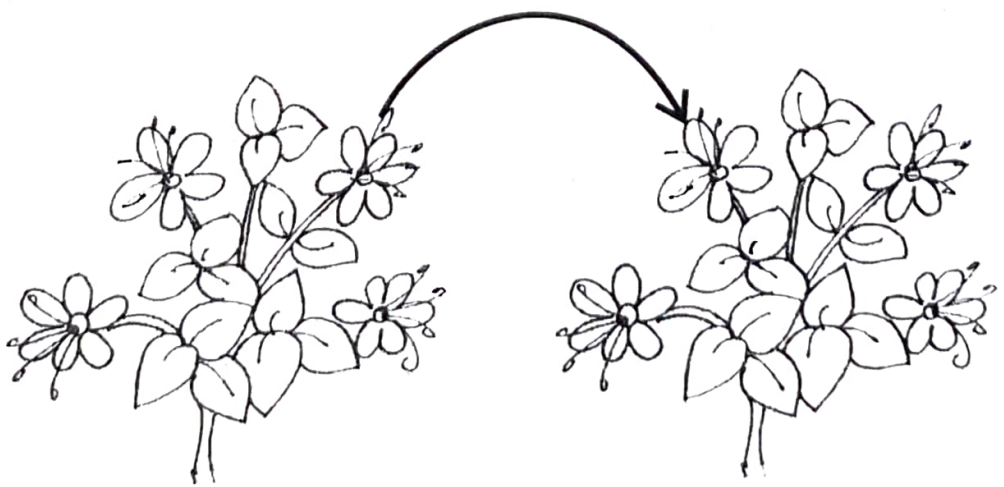
4. **Write the difference between:**
   - (*i*) Style and Filament.
   - (*ii*) Androecium and Gynoecium.
   - (*iii*) Complete and Incomplete flower.
   - (*iv*) Bisexual and Unisexual flower.
5. **Define:**
   - (*i*) Epicalyx
   - (*ii*) Perianth
   - (*iii*) Pistillate
   - (*iv*) Placenta
   - (*v*) Sepaloid perianth

## Level 3

6. (*a*) **Study the figure and answer the following:**
   - (*i*) Label the parts 1–4.
   - (*ii*) Is it a unisexual or bisexual flower?
   - (*iii*) Give reason to support your answer above (*ii*).
   - (*iv*) What is the role of part-4?

   (*b*) **Explain bract. Name a plant which has bracts.**



1. Name:
   (*i*) A wind pollinated flower.
   (*ii*) The condition in which a flower never opens.
   (*iii*) A ripened ovule.
   (*iv*) A flower which contains both male and female flower.
2. Complete the following:
   (*i*) In _____ pollination, stamen and stigma mature at the same time.
   (*ii*) In _____ persistent calyx is present.
   (*iii*) The inner wall of the pollen grain is _____.
3. State the advantages of cross-pollination.
4. 

   (*i*) What process shown in the figure?
   (*ii*) Define the process.
   (*iii*) How does nature favour this process?

5. State whether the following are true or false. Correct the false statements.
   (*i*) The outer wall of pollen grain is exine.
   (*ii*) Fruit is the ripened ovule.
   (*iii*) Pollen grains of wind pollinated flowers are large.
   (*iv*) Self-pollination produces variations.
6. Give one word for the following:
   (*i*) Arrangement of flowers on a twig.
   (*ii*) Pollination by wind.
   (*iii*) Maturing of stigma earlier than the anthers .
   (*iv*) A flower which contains only pistil.
7. Choose the correct option from the brackets:
   (*i*) *Vallisneria* is pollinated by (water, insect, wind, birds)
   (*ii*) The condition in which stigma and anther grow at different heights (herkogamy, heterostyly, Dichogamy, self sterility)
   (*iii*) Pollination by birds. (ornithophily, entomophily, hydrophily, anemophily)
8. Define:
   (*i*) Fertilization. (*ii*) Cleistogamy. (*iii*) Dichogamy.
9. Distinguish between the following:
   (*i*) Self pollination and cross pollination.
   (*ii*) Pollination and fertilization.
   (*iii*) Insect pollination and water pollination.
10. Draw the diagram of Anatropous ovule.

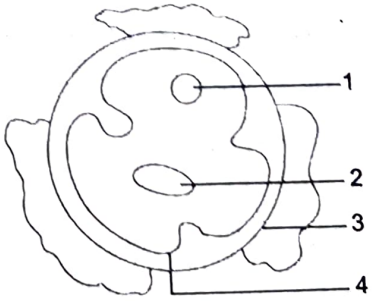
## Level 1

1. **The given statements are wrong. Correct it by changing the underlined word.**
   (*i*) In *entomophilous* flowers, anthers are loosely attached to the filaments.
   (*ii*) *Vallisneria* is a *wind-pollinated* plant.
   (*iii*) The interior of the ovule contains a nutritive tissue called *nucleus*.
   (*iv*) Zygote is the fusion product of *pollination*.
   (*v*) *Pollination* is the process of fusion of male and female gamete.
2. **What happens to the following after fertilization?**
   (*a*) Ovary (*b*) Ovule (*c*) Stamen (*d*) Stigma
3. **Complete the following:**
   (*a*) Pollen tube enters the ovule through _____
   (*b*) Light pollen is present in _____ pollinated flowers.
   (*c*) In _____ pollination variations are produced.
   (*d*) _____ is the protective covering of the ovule.
4. **Match the following:**

| *A* | *B* |
|---|---|
| 1. Ovary wall | (*a*) Emasculation |
| 2. Sticky stigma | (*b*) Protandry |
| 3. Maturing of stigma earlier than the anther | (*c*) Protogyny |
| 4. Artificial pollination | (*d*) Insect pollination |
| | (*e*) Fruit wall |

## Level 2

5. **Give the scientific term for the following:**
   (*a*) Pollination by birds.
   (*b*) The pollination between plants of the same species.
   (*c*) Fusion of male gamete and two polar nuclei.
   (*d*) Male and female flowers borne on separate plants.
6. **Study the figure and answer the following:**
   (*a*) Label the parts 1 – 4.
   (*b*) State the role of part–2.
   (*c*) What does the figure depict?




7. **Explain:**
   (*a*) Emasculation (*b*) Anemophily
   (*c*) Protandry (*d*) Cleistogamy.

## Level 3

8. Draw the figure of germination of pollen grain on the stigma.
9. Explain any two contrivances (or adaptations) in flowers to help cross-pollination.