



CLASS NOTES

Reproduction: The process by which all living things produce more of their own kind is called reproduction.

Parts of a flower:

Sepals:

- The green and leaf-like part that protects a flower in the bud stage.
- Outermost part of a flower.

Petals:

- Either coloured or white-coloured.
- Attract insects.

Stamens:

- Male reproductive part of a flower.
- Consists of a long, narrow filament with an anther at its tip.
- Anthers produce pollen grains, the male cells of a flower.

Carpels:

- Female reproductive part of a flower.
- Consists of stigma, style, and ovary.
- Ovary contains one or more ovules.
- Ovules contain the female cells.

Types of flowers:

Unisexual flowers:

- Flowers which contain either male or female reproductive parts are called unisexual flowers.



- Imperfect flowers
- Examples – watermelon, papaya

Bisexual flowers:

- Flowers which have both the male and female reproductive parts in them are called bisexual flowers.
- Perfect flowers
- Examples – hibiscus, mango plant

Pollination:

- The transfer of pollen grains from the anthers of a flower to the stigma of the same flower or another flower of the same kind is called pollination.
- Agents of pollination are called pollinators.
- Two types of pollination: self-pollination and cross-pollination
- Self-pollination: It is called self-pollination when the pollen grains a flower produces land on the same flower's stigma or another flower on the same plant.
- Example – in orchids
- Cross-pollination: When the pollen grains produced by a flower land on the stigma of a flower on another plant of the same kind, it is called cross-pollination.
- Example – in roses and hibiscus

Fertilisation:

- The process of fusion of the male cell with the egg cell is known as fertilisation.



Other modes of reproduction in plants:

- Reproduction from roots – Sweet potato, dahlia.
- Reproduction from stem and stem cuttings – potato, ginger, rose.
- Reproduction from leaves – Bryophyllum plants.
- Tissue culture – Technique to grow new plants in laboratories from a single cell.

