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Subject : Botany
class : 12th
Unit 1 : Sexual Reproduction
Chapter : Pollination and Fertilization in flowering Plants
Topic : Pollination
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## Pollination:

### Definition:

The transference of pollen grains from the anther of one flower to the stigma of same flower or the another flower with the agency of wind, air, water, insects etc. is called pollination.
It is of two types:
(i) Self - Pollination
(ii) Cross - Pollination

### (1) Self Pollination:

It is the transference of pollen grains from the anther of a flower to the stigma of either the same or genetically similar flower.
Self pollination is of two types:
(i) Autogamy
(ii) Geitonogamy.

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(i) Autogamy (Gk. autos - self; gamos - marriage)

It is a type of self pollination in which an intersexual or perfect flower is pollinated by its own pollen.

Autogamy occurs by three methods:

(a) Homogamy:

In this condition, the anthers and stigmas of open flowers are brought together by growth, bending or folding.

Ex. Catharanthus, Mirabilis, Potato, Sunflower etc.

(b). Cleistogamy (Gk. Kleisto - closed; gamos - Marriage)

The flowers are intersexual. They remain closed causing self pollination. Cleistogamy occurs late in the flowering season in plants.

Ex. Oxalis, Viola etc.

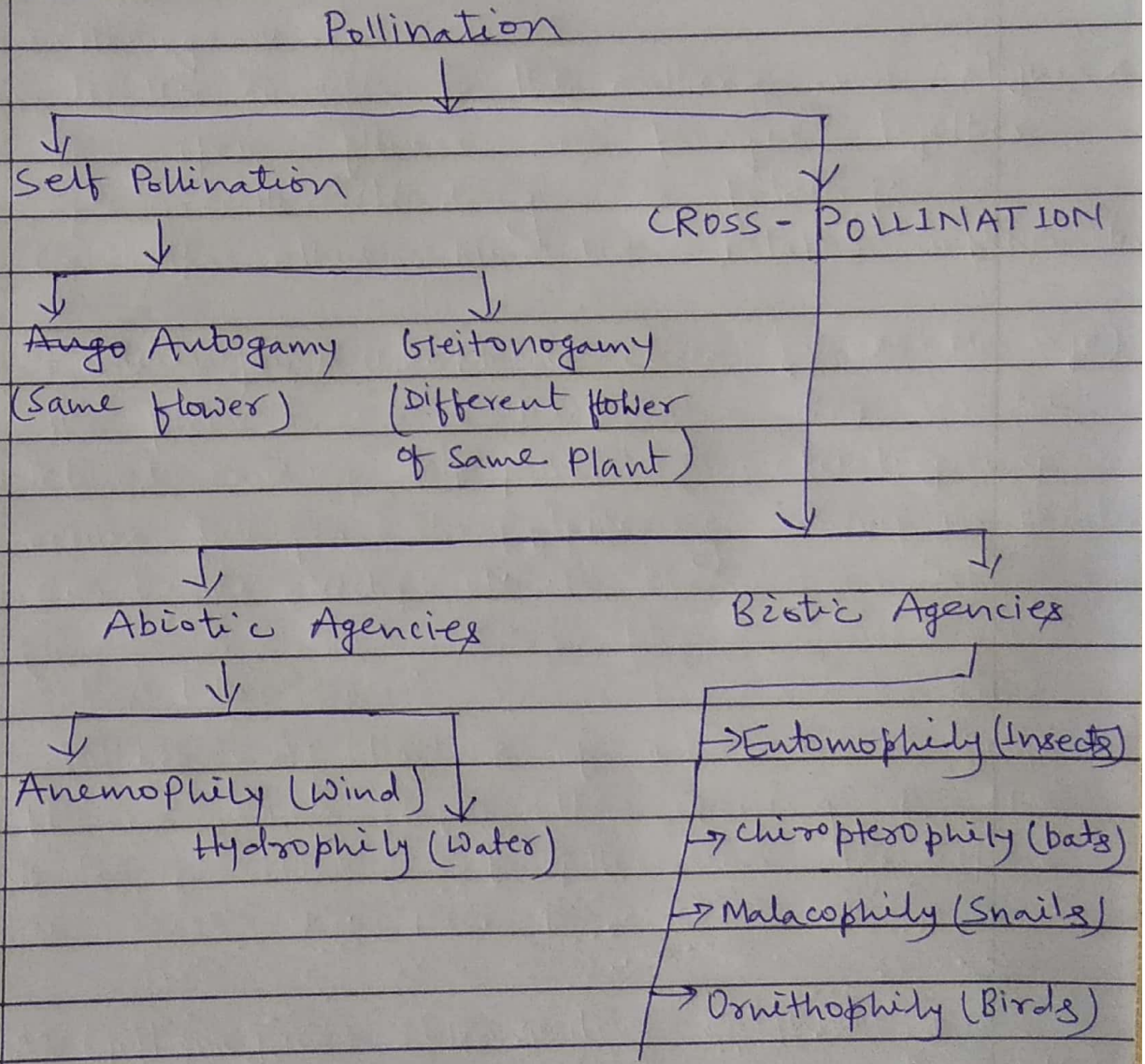
(c) Bud Pollination:

Anthers and stigmas of intersexual or perfect flowers ripen before the opening of the buds so that self pollination takes place as a rule. Ex - Pea, wheat, Rice.

(ii) Geitonogamy (Gk. geiton - neighbour; gamos - marriage)

In this type of self-Pollination Pollen-grain of one flower are transferred to the stigma of another flower belonging to either the same plant or genetically similar plant.

In geitonogamy, the flowers often show modifications similar to ones found in cross pollination.

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