Plant Reproduction

These notes are your ultimate revision weapon to revise Plant Reproduction. We've distilled years of previous exam questions (PYQs) into one powerful, concise resource. Everything you need to know, nothing you don't.

- **PYQs, Decoded:** All key concepts from past exams, organized and simplified.
- **Revise in Record Time:** Short, precise, and designed for last-minute review.
- **Focus on What Matters:** Master high-probability topics and boost your confidence.

Plant Reproduction

Sexual Reproduction

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- The **flower** is the most important part of a plant in terms of its life cycle.
- **Meiosis** is best studied in plant anthers, where **pollen grains** (male gametes) are formed.
- **Dichogamy** is the phenomenon where, in a bisexual flower, the androecium (male part) and gynoecium (female part) mature at different times.
- **Geitonogamy** is the transfer of pollen grains from the anther to the stigma of another flower on the same plant.
- The **embryo** of a plant is found within the **seed**.

Asexual / Vegetative Propagation

- **Characteristics:**
    - Produces a **clonal population** (genetically identical to the parent).
    - Can be practiced during most of the year.

- **Methods and Examples:**
  - **Stem Cutting:** Used for plants like Sugarcane, Bougainvillea, Carnation, and Grapes.
  - **Layering:**
    - **Gootee** is a specific type of layering.
    - **Jasmine** is typically propagated by layering.
  - **Grafting: Sweet orange** is typically propagated by grafting.
- **General Facts:**
  - Plants can be formed like the parent plant from both **seeds** (sexual) and **stem cuttings** (asexual).
  - **Clonal selection**, a breeding method that uses vegetative propagation, can be used in crops like **Potato**.

Seed Technology & Germination

- **Seed Germination:**
  - **Necessary conditions:** Water, proper temperature, and oxygen.
  - **Light** is not an absolute requirement for the germination of all seeds.
- **Seed Dispersal:**
  - The **Censer mechanism** is a type of seed dispersal found in **Poppy**.
- **Seed Categories:**
  - **Breeder seed** is the category of seed that is replaced every year.

Crop Cultivation Practices

Sugarcane Cultivation

- Using **'bud chip settlings'** raised in a nursery saves a substantial amount of seed material.
- Sugarcane can also be cultivated using **settlings prepared from tissue culture**.

Crop Rotation

- A **legume crop** should be followed by a **non-legume crop**.
- It is not recommended to follow a **deep-rooted crop** with the same type of **deep-rooted crop**.

Pollination Agents

- Common pollinating agents include:
    - **Bats**
    - **Bees**
    - **Birds**

Know More About Plant Reproduction:

- Plant Reproduction – Old Year Questions
- Plant Reproduction One Liner Questions & Answers

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