

UNIT III : REPRODUCTION IN PLANTS

6. MODES OF REPRODUCTION

1 VSAQ [2M]

ROOT POINTS

1. **Reproduction** enables a species to live generation after generation.
2. **Types of Reproduction in organisms:** (i) asexual reproduction (ii) sexual reproduction
3. In **asexual reproduction, gametic fusion does not occur**, whereas in sexual reproduction gametic fusion occurs. [IPE]
4. Asexual reproduction is involved with **single parent**, but sexual reproduction involves two parents (Male and Female). [IPE]
5. In asexual reproduction **fertilization doesnot take place**, but in sexual reproduction fertilization takes place. [IPE]
6. In asexual reproduction **off springs are identical and same as parents**, but in sexual reproduction variation in off springs takes place. [IPE]
7. Asexual reproduction is common in algae and fungi, they produce zoospores and conidia.
8. Asexual reproduction of Angiosperms is called **Vegetative Propagation**.
9. Vegetative propagation in angiosperms is by **runners, rhizomes, suckers, tubers, offsets**.
10. The process of formation of two types of gametes, male and female is called **gametogenesis**.
11. **Events of sexual reproduction:** Pre-fertilization, Fertilization and Post-fertilization events.
12. **Pre-fertilization** events include gametogenesis and gamete transfer.
13. **Post-fertilization** events include formation of zygote and embryogenesis. [IPE]
14. Plants are designed as monoecious and dioecious. Flowers may be unisexual or bisexual.
15. **Transfer of male gametes** is done by **pollination** in angiosperms.
16. **Syngamy** occurs between male and female gametes. Syngamy may be external or internal.
17. The process of development of **embryo from zygote** is called **embryogenesis**.
18. In flowering plants after fertilisation **ovary develops into fruit and ovules into seeds**.

19. **Sexual reproduction** generates new genetic combinations leading to variation. [NEET-2016]
20. In ginger, vegetative propagation occurs through **rhizome**. [NEET-2015]
21. Meiosis takes place in **meiocyte**. [NEET-2013]
22. Offsets are produced by Mitotic divisions. [NEET-2018]
23. The eyes of the potato tuber are **axillary buds**. [2011 PMT]
24. Vegetative propagation in Pistia occurs by **offset**. [2010 PMT]
25. Vegetative propagation in mint occurs by **sucker**. [2009 PMT]
26. Asexual Reproductive structure in Penicillium is **Canidia**. [NEET-2022]