

7. SEXUAL REPRODUCTION IN FLOWERING PLANTS

1 × 8 = 8 Marks

ROOT POINTS

1. **Flowers** are **morphological and embryological** marvels and the sites of sexual reproduction.
2. **Pollen grains** are developed inside the microsporangia.
3. Individual microspores mature into **pollen grains**.
4. The pollen grain may have **two cells or three cells** at the time of **shedding**.
5. Ovules are present in the ovary. Each ovule is covered by two integuments.
6. One of the megaspores form the embryo sac (the female gametophyte).
7. The mature embryo sac is 7-celled or 8- nucleate.
8. **Pollination** is a mechanism of transfer of pollen grains from the anther to stigma.
9. **Pollinating agents** are either abiotic (wind, water) or biotic (animals).
10. After fertilisation, **ovary develops into fruit** and **ovules develop into seeds**.
11. **Parts of mature angiosperm embryo sac:** (i) Egg apparatus (ii) Central cell (iii) Antipodals
12. **Types of wall layers of microsporangium:** [IPE]
 (i) Epidermis (ii) Endothecium (iii) Middle layers (iv) Tapetum
13. **Steps in Fertilization of angiosperms:** [IPE]
 (i) **Entry of the pollen tube into ovule:** (a) Porogamy (b) Chalazogamy (c) Mesogamy
 (ii) Entry of pollen tube into embryo sac (iii) Discharge of male gametes into Embryosac
 (iv) Syngamy (v) Triple fusion and double fertilisation

FRUITY Qs OF IPE**1x 8 = 8 Marks**

1. With a neat, labelled diagram, describe the parts of a mature angiosperm embryo sac. Mention the role of synergids.
2. Draw the diagram of a microsporangium and label its wall layers. Write briefly about the wall layers.
3. Describe the process of Fertilization in angiosperms.

BULLET MASTER'S**BOT BEATS!**

We the Humans like updating versions whether in our gadgets or in our life style. In the same way, Nature also accepts updated versions like HYBRIDS, which are results of **SEXUAL REPRODUCTION**, that involve fusion of male and female gametes which make more healthy individuals to continue their own species in this vast earth.