



Class 12 Biology | Sexual Reproduction In Flowering Plants

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. One normal microspore mother cell produces how many microspores after meiosis?

- A. 4 B. 2 C. 8 D. 1

2. The nutritive layer surrounding developing pollen in an anther is the

- A. Tapetum B. Middle layer alone
C. Epidermis D. Endothecium

3. The resistant outer wall of a pollen grain contains

- A. Glycogen B. Sporopollenin
C. Chitin D. Peptidoglycan

4. A typical mature Polygonum-type embryo sac has

- A. 8 cells and 8 nuclei B. 7 cells and 8 nuclei
C. 8 cells and 7 nuclei D. 7 cells and 7 nuclei

5. The egg apparatus consists of

- A. One egg and two synergids
B. Two eggs and one synergid
C. One egg and two polar nuclei
D. Three antipodals

6. Pollen transfer between two flowers on the same plant is

- A. Parthenocarpy B. Xenogamy
C. Geitonogamy D. Apomixis

7. Which transfer introduces pollen from a genetically different plant of the same species?

- A. Geitonogamy B. Cleistogamy
C. Autogamy D. Xenogamy

8. A cleistogamous flower most reliably ensures

- A. Wind pollination B. Insect pollination
C. Autogamy D. Xenogamy

9. Self-incompatibility prevents self-fertilisation through

- A. Loss of all ovules
B. Pollen-pistil recognition
C. Absence of every pollen grain
D. Fruit formation without seeds

10. One male gamete fuses with the egg to form the

- A. Diploid zygote
B. Diploid seed coat directly
C. Triploid endosperm nucleus
D. Haploid embryo

11. The other male gamete normally fuses with two polar nuclei to form a

- A. Diploid zygote
B. Tetraploid egg
C. Triploid primary endosperm nucleus
D. Haploid antipodal

12. In a plant with $2n = 24$, normal endosperm nuclei have

- A. 48 chromosomes B. 36 chromosomes
C. 24 chromosomes D. 12 chromosomes

13. After fertilisation, the ovule normally develops into a

- A. Stigma B. Seed C. Fruit wall D. Petal

14. Fruit formation without fertilisation is called

- A. Microsporogenesis B. Parthenocarpy
C. Syngamy D. Polyembryony

15. A seed with multiple embryos illustrates

- A. Dichogamy B. Geitonogamy
C. Dioecy D. Polyembryony

ANSWER KEY — check after completing all 15 questions

1.A 2.A 3.B 4.B 5.A 6.C 7.D 8.C 9.B 10.A 11.C 12.B 13.B 14.B 15.D