

Chapter – 1 | Sexual Reproduction in Flowering Plants

QUIZ
PART-02

1. Microsporogenesis is the formation of microspores through —

- A. Mitosis
- B. Fragmentation
- C. Meiosis
- D. Budding (C)

Explanation : Microspores are formed by meiosis from pollen mother cells.

2. Each cell of sporogenous tissue is capable of developing into a —

- A. Seed coat
- B. Microspore tetrad
- C. Fruit wall
- D. Cotyledon (B)

Explanation : Cells of sporogenous tissue can form microspore tetrads.

3. Pollen grains represent the —

- A. Female gametophyte
- B. Male gametophyte
- C. Zygote
- D. Embryo sac (B)

Explanation : Pollen grain is the male gametophyte.

4. The hard outer wall of pollen grain is called —

- A. Intine
- B. Exine
- C. Nucellus
- D. Tapetum (B)

Explanation : Exine is the hard outer wall of pollen grain.

5. Exine is mainly composed of —

- A. Cellulose
- B. Pectin
- C. Sporopollenin
- D. Protein (C)

Explanation : Sporopollenin makes the exine highly resistant.

6. Germ pores are regions where —

- A. Sporopollenin is absent
- B. Intine is absent
- C. Nucleus is absent
- D. Cytoplasm is absent (A)

Explanation : Germ pores are apertures in exine where sporopollenin is absent.

7. The inner wall of pollen grain is composed of —

- A. Sporopollenin only
- B. Cellulose and pectin
- C. Lignin and suberin
- D. Proteins and fats (B)

Explanation : Intine is made of cellulose and pectin.

8. In about 60% of angiosperms, pollen grains are shed at the —

- A. One-celled stage
- B. Two-celled stage
- C. Four-celled stage
- D. Eight-celled stage (B)

Explanation : Most angiosperms shed pollen at the two-celled stage.

9. Pollen grains can be stored for years by cryopreservation at —

- A. 0°C
- B. -20°C
- C. -100°C
- D. -196°C (D)

Explanation : Pollen grains are stored in liquid nitrogen at -196°C.

10. Parthenium pollen may cause —

- A. Pollen allergy
- B. Seed dormancy
- C. Double fertilization
- D. Polyembryony (A)

Explanation : Parthenium pollen is linked with allergies such as asthma and bronchitis.