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Based on NCERT patterns

### Questions practice for PA 1

## Sexual Reproduction in Flowering Plants

1. How many microspore mother cells are required to produce 1000 microspores/pollen grains?

- (a) 100
- (b) 150
- (c) 200
- (d) 250

2. Which of the following represents the female gametophyte in angiosperms?

- (a) Embryo
- (b) Embryo sac
- (c) Synergid
- (d) Endosperm

3. In a breeding experiment, the selected male parent is diploid and the female parent is tetraploid. What will be the **ploidy** level of the endosperm that will develop after double fertilisation?

- (a) Diploid
- (b) Triploid
- (c) Tetraploid
- (d) Pentaploid

4. The development of fruits without fertilisation of the ovary, is called

- (a) parthenogenesis
- (b) parthenocarpy

- (c) agamospermy
- (d) apomixis

5. When the pollen of a flower is transferred to the stigma of another flower on the same plant, the process is known as

- (a) autogamy
- (b) geitonogamy
- (c) xenogamy
- (d) cleistogamy

6. The number of meiotic divisions, required to produce 400 seeds in a pea plant, is

- (a) 100
- (b) 200
- (c) 400
- (d) 500

7. A dicotyledonous plant bears flowers but never produces fruits and seeds. The most probable cause for the above situation is \_\_\_\_\_

- (a) plant is dioecious and bears only pistillate flowers.
- (b) plant is dioecious and bears both pistillate and staminate flowers.
- (c) plant is monoecious.
- (d) plant is dioecious and bears only staminate flowers.

8. Autogamy can occur in a chasmogamous flower if \_\_\_\_\_

- (a) pollen matures before maturity of ovule.
- (b) ovules mature before maturity of pollen.
- (c) both pollen and ovules mature simultaneously.
- (d) both anther and stigma are of equal lengths.

9. Choose the correct statement from the following.

- (a) Cleistogamous flowers always exhibit autogamy.
- (b) Chasmogamous flowers always exhibit geitonogamy.
- (c) Cleistogamous flowers exhibit both autogamy and geitonogamy.
- (d) Chasmogamous flowers never exhibit autogamy.

10. From among the situations given below, choose the one that prevents both autogamy and geitonogamy.

- (a) Monoecious plant bearing unisexual flowers.
- (b) Dioecious plant bearing only male or female flowers.
- (c) Monoecious plant with bisexual flowers.
- (d) Dioecious plant with bisexual flowers.

11. In a fertilised embryo sac, the haploid, diploid and triploid structures are:

- (a) Synergid, zygote and primary endosperm nucleus.
- (b) Synergid, antipodal and polar nuclei.
- (c) Antipodal, synergid and primary endosperm nucleus.
- (d) Synergid, polar nuclei and zygote.

12. In an embryo sac, the cells that degenerate after fertilisation are: [NCERT Exemplar]

- (a) Synergids and primary endosperm cell.
- (b) Synergids and antipodals.
- (c) Antipodals and primary endosperm cell.
- (d) Egg and antipodals.

13. Which of the following floral parts forms the pericarp after fertilisation?

- (a) Nucellus
- (b) Outer integument
- (c) Ovary wall
- (d) Inner integument

14. The stalk of the ovule is called \_\_\_\_\_ .

15. The outer integument of the ovule develops into \_\_\_\_\_ after fertilisation.

16. The exine of pollen grains is made up of \_\_\_\_\_ .

17. The outermost layer of endosperm in a maize grain is known as \_\_\_\_\_ .

18. A bisexual flower that never opens, is called \_\_\_\_\_ .

19. In the grass family, the single cotyledon is called \_\_\_\_\_ .

20. The hollow foliar structure that encloses the leaf primordia in a grass embryo, is called \_\_\_\_\_ .

21. In apple, the \_\_\_\_\_ also contributes to fruit formation and becomes edible.

22. Occurrence of more than one embryo in a seed, is known as \_\_\_\_\_ .