

1. **Answer:** C

Explanation: The union of the two sperms to the different nuclei of the embryo sac is called double fertilization and the resulting endosperm is unique to angiosperms

2. **Answer:** A

Explanation: The stamens and carpels are reproductive organs containing sperm and eggs, respectively.

3. **Answer:** B

Explanation: Pollination, the transfer of pollen from the anther to stigma, usually leads to fertilization. After pollination, the pollen grain germinates on the stigma.

4. **Answer:** B

Explanation: During fertilization, each spore divides mitotically, becoming a multicellular gametophyte, the plant's haploid generation. The gametophyte produces gametes by mitosis.

5. **Answer:** B

Explanation: The term pistil is used to refer to a single carpel or a group of two or more fused carpels.

6. **Answer:** A

Explanation: The result of embryonic development in the ovule is a mature seed and near the end of its maturation, the seed loses most of its water and forms a hard, resistant seed coat.

The embryo, surrounded by its endosperm food supply, becomes dormant and will not develop further until the seed germinates. This condition is known as seed dormancy and is a key evolutionary adaptation.

7. **Answer:** C

Explanation: Some monocots use a different mechanism for breaking ground at germination. A protective sheath (called the coleoptile) surrounding the shoot pushes upward and breaks through the soil. The shoot tip then grows up through the tunnel provided by the sheath.

8. **Answer:** C

Explanation: Fruit is a matured ovary that acts as a vessel of the seed.

9. **Answer:** D

Explanation: Mature fruit can be either fleshy or dry. Examples of fleshy fruits are those of oranges, plums, and grapes, where the ovary wall becomes soft during ripening. Dry fruits include nuts and beans whose ovary walls dry out at maturity. The dry, wind-dispersed fruits of grasses, harvested while on the plant, are major staple foods. These include cereal grains of wheat, rice, and corn, which are easily mistaken for seeds.

10. **Answer:** B

Explanation: Germination usually begins when the seed takes up water, a process known as imbibition. The hydrated seed expands, rupturing the coat. The inflow of water triggers metabolic changes that restart the growth of the embryo. Enzymes begin digesting stored nutrients in the endosperm or cotyledons, and these nutrients are transported to the growing regions of the embryo.