

NCERT SOLUTIONS- REPRODUCTION IN PLANTS

NCERT Solutions for Class 7 Science Chapter 12 Reproduction in Plants is the essential study material to perfect Reproduction in Plants topics. The NCERT Class 7 Science solutions provided here correctly answer NCERT textbook questions. Solutions curated comprehensively will help students understand the subtopics in this chapter in a better way.

IMPORTANT SUB-TOPICS MENTIONED IN THE NCERT CLASS 7 SCIENCE CHAPTER 12 REPRODUCTION IN PLANTS:

NCERT Solutions for Class 7 Science Chapter 12 Reproduction in Plants has the following sub-topics as given below:

Sr. no	Topics
1.	Sexual reproduction in plants
2.	Formation of fruits and seeds
3.	Dispersal of seeds

NCERT SOLUTIONS CLASS 7 SCIENCE CHAPTER 12 REPRODUCTION IN PLANTS:

1. Fill in the blanks:

(a) Production of new individuals from the vegetative part of the parent is called _____.

(b) A flower may have either male or female reproductive parts. Such a flower is called _____.

(c) The transfer of pollen grains from the anther to the stigma of the same or of another flower of the same kind is known as _____.

(d) The fusion of male and female gametes is termed as _____.

(e) Seed dispersal takes place by means of _____, _____ and _____.

ANS-

- vegetative propagation
- unisexual flower
- Pollination
- Fertilisation
- wind, water and animals

2. Describe the different methods of asexual reproduction. Give examples.

ANS- Different methods of asexual reproduction are given below:

- Vegetative Propagation- It is a type of asexual reproduction in which new plants are produced from roots, stems, leaves and buds.

Examples:

- Stem cutting of the rose
- Tuber of potato
- Rhizome of ginger
- Leaf buds of bryophyllum

- b. Budding- The bud is a tiny bulge that grows over time, separates from the parent cell, and develops into a new yeast cell. The fresh yeast cell develops, multiplies, and gives rise to other yeast cells.

Examples:

- yeast

- c. Fragmentation- An alga breaks up into two or more fragments. These fragments or pieces grow into new individuals

Examples:

- Algae

- d. Spore Formation- This reproduction is carried out via spores, which, in the right conditions, germinate and grow into new individuals.

Examples:

- Fungus like Rhizopus'
- Ferns

3. Explain what you understand by sexual reproduction.

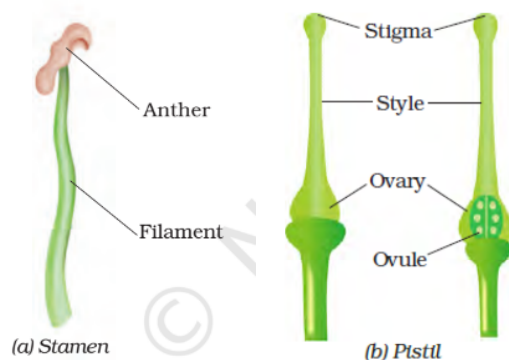
ANS- Sexual reproduction is a method of reproduction where two gametes, male and female respectively fuse together to form an offspring. In plants, the stamen is the male reproductive part which bears anther and the pistil is the female reproductive part which bears an ovary. Anther produces pollen which is the male gamete of the plants and ovary produces egg which are female gametes of the plant.

4. State the main difference between asexual and sexual reproduction.

ANS-

ASEXUAL REPRODUCTION	SEXUAL REPRODUCTION
One parent is required	Two parents, one male and one female are necessary
Daughter cells are identical to the parent and each other	Offsprings show variations as compared to parents and each other
No need for special reproductive organs	Need for special reproductive organs.
Ex- Yeast	Ex- Human, Plants

5. Sketch the reproductive parts of a flower.



ANS-

6. Explain the difference between self-pollination and cross-pollination.

ANS-

Self Pollination	Cross-Pollination
If the pollen lands on the stigma of the same flower or another flower of the same plant, it is called self-pollination.	When the pollen of a flower lands on the stigma of a flower of a different plant of the same kind, it is called cross-pollination
Occurs in bisexual flowers.	This occurs in both bisexual and unisexual flowers

7. How does the process of fertilisation take place in flowers?

ANS- The process of fusion of male and female gametes (to form a zygote) is called fertilisation. The zygote develops into an embryo.

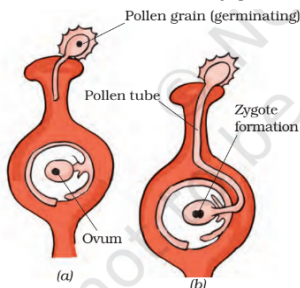


Fig. 12.11 Fertilisation (Zygote formation)

8. Describe the various ways by which seeds are dispersed.

ANS- Seeds and fruits of plants are carried away by the wind, water and animals. Winged seeds such as those of drumstick and maple, light seeds of grasses or hairy seeds of aak (Madar) and hairy fruit of the sunflower get blown off with the wind to faraway places. Some seeds are dispersed by water. These fruits or seeds usually develop floating ability in the form of a spongy or fibrous outer coat as in coconut. Some seeds are dispersed by animals, especially spiny seeds with hooks which get attached to the bodies of animals and are carried to distant places. Examples are Xanthium and Urena. Some seeds are dispersed when the fruits burst with sudden jerks. The seeds are scattered far from the parent plant. This happens in the case of castor and balsam.

9. Match items in Column I with those in Column II:

Column-I	Column-II
(a) Bud	(i) Maple
(b) Eyes	(ii) Spirogyra
(c) Fragmentation	(iii) Yeast
(d) Wings	(iv) Bread mould
(e) Spores	(v) Potato

	(vi) Rose
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ANS-

Column-I	Column-II
(a) Bud	(iii) Yeast
(b) Eyes	(v) Potato
(c) Fragmentation	(ii) Spirogyra
(d) Wings	(i) Maple
(e) Spores	(iv) Bread mould
(a) Bud	(iii) Yeast

10. Tick the correct answer:

- The reproductive part of a plant is the
(i) leaf (ii) stem (iii) root (iv) flower
- The process of fusion of the male and the female gametes is called
(i) fertilisation (ii) pollination (iii) reproduction (iv) seed formation
- Mature ovary forms the
(i) seed (ii) stamen (iii) pistil (iv) fruit
- A spore-producing organism is
(i) rose (ii) bread mould (iii) potato (iv) ginger
- Bryophyllum can reproduce by its
(i) stem (ii) leaves (iii) roots (iv) flower

ANS-

- (iv) flower
- (i) fertilization
- (iv) Fruit
- (ii) bread mould
- (ii) leaves