

# Multiplication in Plants

## ORAL QUESTIONS

### A. Answer these questions orally.

1. What is the process of production of new individuals from their parents called?
2. What are the types of reproduction exhibited by plants?
3. Name three common forms of asexual reproduction.
4. How many parents are required in asexual reproduction.
5. What are the male gametes in plants called?

## PUZZLE/QUIZ

### B. Complete the following word-puzzle with help of clues given alongside.

1. Fusion of male and female gametes.

2. Asexual reproductive body having hard protective outer covering.

3. A sac-like structure in which spores are produced asexually.

4. Formation of new plants from adult plant body.

5. Transfer of pollen grains from anther to stigma.

6. Formation of new cell or organism as a small bud like growth.

7. The shoot-forming part.

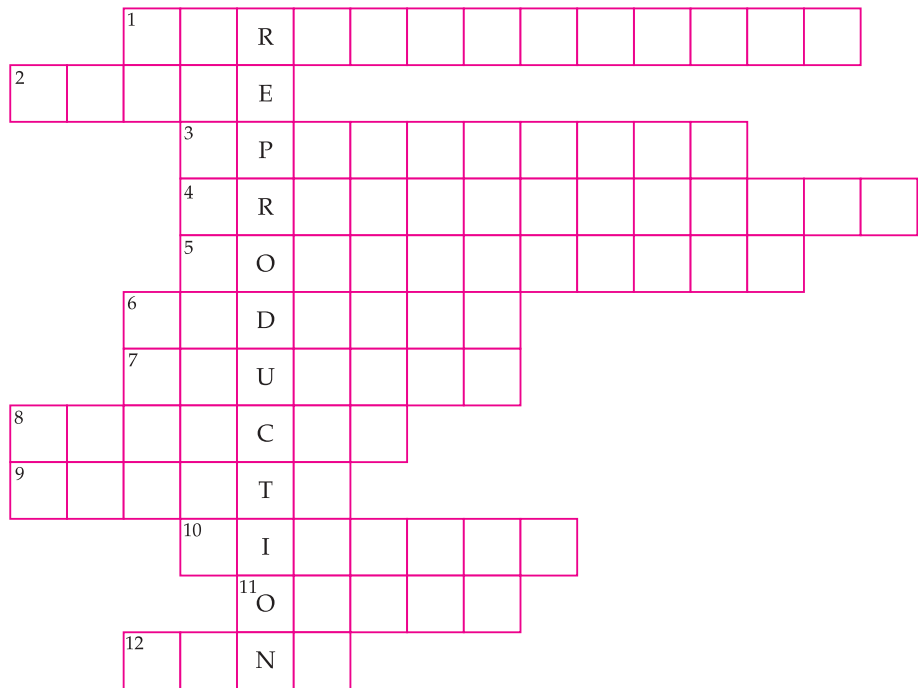
8. The root-forming part.

9. A reproductive cell.

10. *Amoeba* reproduces by this asexual method of reproduction.

11. A part of pistil.

12. An agent of seed dispersal.

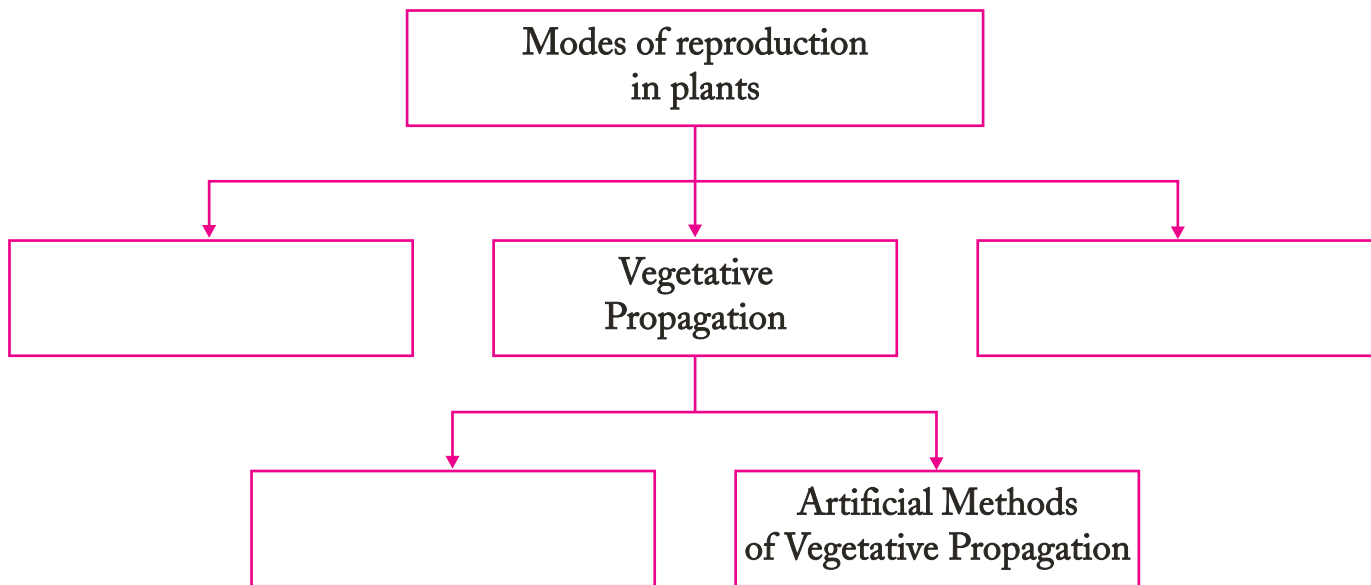


**C. State whether the following statements are True or False?**

1. Seed germination produces new plants.
2. Sexual reproduction requires only one parent and no reproductive organs are required.
3. *Xanthium* and *Urena* are dispersed by water.
4. The fertilized ovum is called pistil.
5. *Bougainvillea* is propagated both by cutting and layering

**CLASS TEST**

**D. Complete the following flow-chart.**



**E. Very short answers questions.**

1. Give one example of an organism which reproduces by
  - (a) Budding \_\_\_\_\_
  - (b) Fission \_\_\_\_\_
  - (c) Fragmentation \_\_\_\_\_
  - (d) Spore formation \_\_\_\_\_
  - (e) Roots \_\_\_\_\_
  - (f) Veins \_\_\_\_\_
  - (g) Layering \_\_\_\_\_
  - (h) Cutting \_\_\_\_\_
  - (i) Grafting \_\_\_\_\_

2. Name a plant whose seeds are dispersed by

(a) Water \_\_\_\_\_

(b) Wind \_\_\_\_\_

(c) Animals \_\_\_\_\_

3. What is fragmentation?

\_\_\_\_\_

4. What is spore formation?

\_\_\_\_\_

5. What is scion?

\_\_\_\_\_

6. What is stalk?

\_\_\_\_\_

\_\_\_\_\_

7. What is a zygote?

\_\_\_\_\_

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8. Name the various agents of seed dispersal.

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\_\_\_\_\_

**F. Short answer questions.**

1. Differentiate between the following.

(a) Sexual reproduction and Asexual reproduction

SEXUAL REPRODUCTION	ASEXUAL REPRODUCTION

(b) Self-pollination and Cross-pollination

SELF-POLLINATION	CROSS-POLLINATION

2. What is vegetative reproduction?

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3. How does fragmentation occur in algae?

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4. How does spore formation occur in fungi?

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5. Why are potato, ginger, sweet potato, etc. swollen?

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6. How does potato reproduce? Explain.

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7. How do gingers reproduce?

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8. Explain the method 'stem cutting'. Give examples of plants in which it is used?

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9. Explain 'layering'. Give examples of plants in which it is used?

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10. How is seed dispersal beneficial to plants?

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**G. Long answer questions.**

1. Explain 'grafting'. Give examples of plants in which it is used.

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2. Explain 'tissue culture.'

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3. What are the advantages of vegetative propagation?

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4. Explain the following with examples.

(a) Pollination by water

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(b) Pollination by birds

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5. Explain how fertilisation occurs in a flower.

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6. What changes occur in a flower after fertilisation?

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7. Explain the following with examples.

(a) Seed dispersal by water

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(b) Seed dispersal by wind

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(c) Seed dispersal by animals

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(d) Seed dispersal by explosive mechanism

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8. Write a note on 'germination of seed.' Draw diagram also.



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2. (a) Which method of reproduction is shown below?

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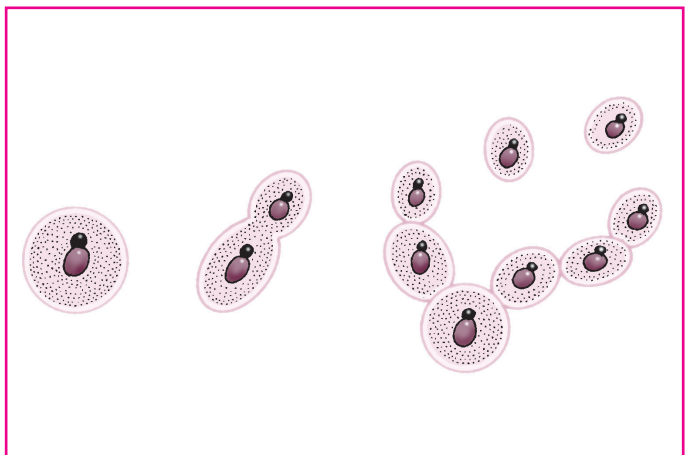
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(b) In which organism is this mode of reproduction occurring?

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(c) What is the small bulb-like projection coming out from the cell called?

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### HOME ASSIGNMENTS

#### **H. Think and Answer.**

1. Flowers are generally colourful and fragrant. Why?

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2. Identify the following.

(a) How are the seeds of plant scattered?

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(b) How are the fruits of plant scattered?

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## WORKSHEET

### **I. Give reasons for the following.**

1. The wind-pollinated flowers produce small and light pollens.

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2. Bird-pollinated flowers are not scented.

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3. Bird-pollinated flowers are bright red, yellow or orange in colour.

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4. Mammal-pollinated flowers are quite sturdy.

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