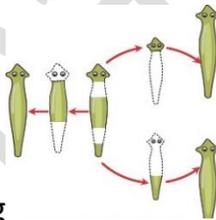


Q1. Multiple choice question:

- a. Fruit is formed from
 - 1. Stamen
 - 2. Ovary
 - 3. Stigma
 - 4. ovule
- b. Unisexual flowers contain
 - 1. Both stamen and carpel
 - 2. Only stamen
 - 3. Only carpel
 - 4. Either stamen or carpel
- c. Plants of desired qualities are produced by
 - 1. Cutting
 - 2. Grafting
 - 3. Layering
 - 4. All of these
- d. After fertilization which of the following parts develops into seeds
 - 1. Ovary
 - 2. Pollen grain
 - 3. Ovule
 - 4. stigma
- e. The type of reproduction shown in the figure is



- 1. Budding
- 2. Fragmentation
- 3. Regeneration
- 4. fission

Q2. Fill in the blanks:

- a. In potato and ginger, vegetative propagation takes place by _____

- b. A typical flower has four main whorls, namely calyx, _____ androecium and _____.
- c. Cutting _____ and grafting are the three methods of artificial _____ reproduction.
- d. Flowering plants exhibit _____ fertilization.
- e. During asexual reproduction _____ cell division does not occur.

Q3. Very short answer type question

- a. Name the part of Bryophyllum where the buds are produced for vegetative propagation.
- b. Name the method by which Hydra reproduces. Is this method sexual or asexual?
- c. Name the life process of an organism that helps in the growth of its population.
- d. State the method used for growing rose plants and jasmine plants.
- e. Name a plant which can reproduce by fragmentation.

Q4. Short answer type question:

- a. List two advantages of vegetative propagation.
- b. Define the terms unisexual and bisexual giving one example of each.
- c. Mention the reproductive parts of a flower.
- d. How is the process of binary fission different in Amoeba and Leishmania?
- e. How do Leishmania and plasmodium reproduce? State one difference in their mode of reproduction.

Q5. Draw a diagram of the longitudinal section of a flower exhibiting germination of pollen on stigma and label ovary, male germ-cell and ovule on it.

Q6. What is pollination? How does it occur in plants? How does pollination lead to fertilization? Explain.

Q7. Distinguish between self-pollination and cross-pollination.

Q8. How are the modes of reproduction different in unicellular and multicellular organisms?

Q9. What is tissue culture?

Q10. Define artificial method of vegetative propagation and differentiate between Cutting and Grafting.