

Welland Gouldsmith Schools

Class: VIII

Subject: Biology

Reproduction is the process in which the living organisms produce new individuals of their own kind. There are two kind of reproduction: Asexual and sexual reproduction. Hermaphrodites are animals that produce male and female gametes.

Organisms reproduce asexually by: Binary fission- bacteria, budding- yeast fragmentation- spirogyra, spore formation-fungus, regeneration- lizard.

Some natural methods of vegetative propagation are: Rhizome, tubers, corm, bulb, leaves, stem, roots.

The major artificial methods are; Cutting, Layering, Grafting, budding, tissue culture. Advantages of vegetative propagation are: Seedless plants, Plants need less care and attention, clone copies, faster multiplying of plants.

a) Name the following:

- 1) A plant that can be grown by stem cutting.
- 2) The detached stem part of one plant.
- 3) Stems that grow along the surface of the ground.
- 4) The reproduction in which no sex cells are involved.
- 5) An example of a hermaphrodites.
- 6) Reductional division in which chromosomes are reduced to half.
- 7) An underground stem that looks and acts like a root.
- 8) An example of a plant showing vegetative propagation by leaves.

B) Match the following:

COLUMN A

1. bacteria
2. Tissue culture
3. Carnations

COLUMN B

- a. Cutting
- b. Vegetative propagation
- c. Cyst formation

4. Stock

d. Agar

5. Seedless plants

e. Good roots

c) Briefly answer the questions:

1) What is meant by parthenogenesis?

2) Explain the process of reproduction in yeast.

3) What is bulbis?

4) What is tissue culture? Explain the steps involved in tissue culture.

5) State two advantages and two disadvantages of vegetative propagation.

d) Draw and label the process involved in sexual reproduction.

e) Draw, label and explain the process of spore formation in a bread mould.