UDAAN 2025

BIOLOGY

How do Organisms Reproduce?

- **Q1** In a potato, vegetative propagation takes place by:
 - (A) root (B) leaf (C) stem tuber (D) seed
- **Q2** In Rhizopus, blob like structures at tips of filaments are called
 - (A) filaments
 - (B) hyphae
 - (C) rhizoids
 - (D) Sporangia
- **Q3** Which of the following structures are found inside sporangia?
 - (A) Spores
 - (B) Sporangiophores
 - (C) Rhizoids
 - (D) Hyphae
- **Q4** Bryophyllum can be propagated vegetatively by the

- (A) stem (B) leaf (C) root (D) flower
- **Q5** Which of the following organism use ability of regeneration as a mode of reproduction?
 - (A) Amoeba (B) Lizard
 - (C) Planaria (D) Bread mould
- Q6 Vegetative propagation refers to formation of new plants from
 - (A) stem, flowers and fruits
 - (B) stem, leaves and flowers
 - (C) stem, roots and flowers
 - (D) stem, roots and leaves
- **Q7** Vegetatively propagated plants
 - (A) do not bear roots
 - (B) do not bear buds
 - (C) are genetically similar
 - (D) all of these

Answer Key

Q1	(C)	Q5	(C)
Q2	(D)	Q6	(D)

Q3 (A) Q7 (C)

Q4 (B)



Hints & Solutions

Q1 Text Solution:

Potatoes propagate vegetatively through structures known as stem tubers. A stem tuber is a swollen underground part of a stem that stores nutrients and has buds, often called "eyes." Each of these eyes can develop into a new plant. When conditions are favorable, the buds sprout and grow into new potato plants, each capable of producing more tubers.

Video Solution:



Q2 Text Solution:

In Rhizopus, the blob-like structures at the tips of filaments are called sporangia. These structures produce spores through asexual reproduction.

Video Solution:



Q3 Text Solution:

Sporangia are structures found in fungi like Rhizopus that contain spores. Spores are reproductive cells capable of developing into new organisms under favorable conditions.

Video Solution:



Q4 Text Solution:

Bryophyllum propagates vegetatively through adventitious buds on its leaves, which can grow into new plants.

Video Solution:



Q5 Text Solution:

Planaria is an organism that uses the ability of regeneration as a mode of reproduction. Planaria can regenerate into new individuals from fragments of their body, making regeneration a form of asexual reproduction in these organisms.

Video Solution:



Q6 Text Solution:

Vegetative propagation involves the formation of new plants from parts like the stem, roots, and leaves.

Video Solution:



Q7 Text Solution:

Vegetatively propagated plants are clones of the parent plant, meaning they are genetically identical to the parent plant.

Video Solution:

