

Dt - 29/07/2021

## Home Assignment

(a) When happens when, accidentally, Planaria gets cut into many pieces?

When Planaria accidentally gets cut into many pieces then its each piece grows into a complete organism. This is known as Regeneration.

(b) Bryophyllum leaf falls on the wet soil?

When Bryophyllum leaf falls on wet soil buds produced on the notches along the leaf margin develop into new plants. This is a form of vegetative propagation.

(c) On maturation Sporangia of Rhizopus bursts?

When the Sporangia of Rhizopus bursts on maturation, the spores present inside it spread in the open environment. Then, with the help of different agents, they

Q. 3

Differentiate between binary and multiple fission, name an organism that reproduces by multiple fission.

Ans.

Binary fission

Multiple fission

(i) 2 daughter cells are formed from the splitting of the parent's nucleus or cell.

(i) many daughter cells are formed from the splitting of the parent's cell or nucleus.

(ii) occurs during favourable conditions.

(ii) occurs during unfavourable conditions.

(iii) Divides only once.

(iii) Divides repeatedly.

(iv) includes a definite pattern of division.

(iv) has no pattern of division.

(v) Example :- Amoeba, Bacteria, Euglena, etc.

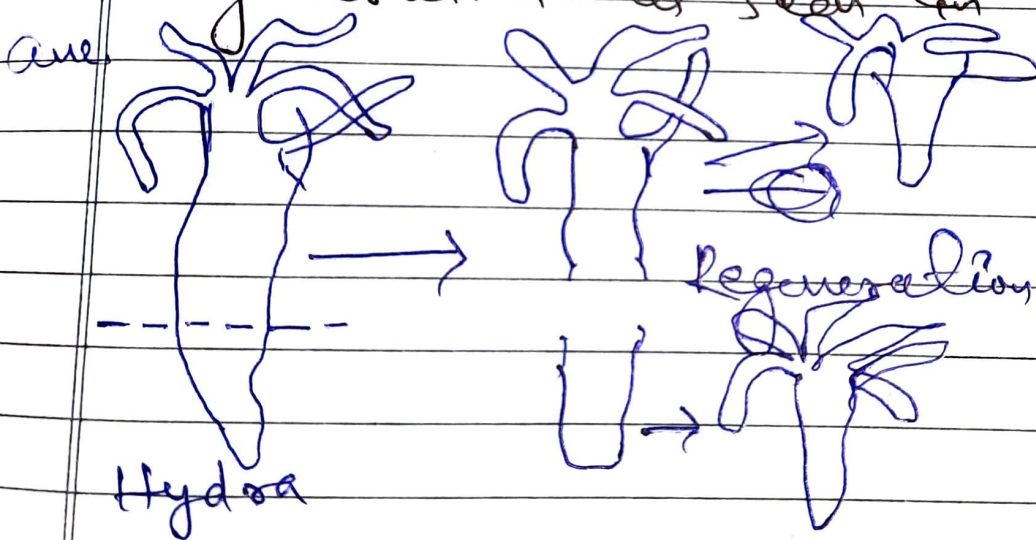
(v) Example :- Plasmodium, Sporozoans, Algae etc.



(ii) Vegetative propagation is beneficial to plants that are propagated sexually. Here two advantages are (i) plants bear flowers and fruits earlier.

(ii) Desirable ~~parts~~ parts can be propagated due to genetic similarity.

(3) (a) with the help of a diagram demonstrate the process of regeneration as seen in Hydra.



(ii) which type of cells are used by such multicellular organisms to regenerate?  
ans. Specialised cells or Regenerative cells.