How
29/7/21

1) What happens when -

a) Accidentially, planeria gets cut into many pieces?

Ans When planaria gets cut into many pieces, it will undergo a process known as regeneration due to which each piece will regenerate into a new planaria organism.

b) Bryophyllum leaf falls on the wet soil?

Ans When Bryophyllum leaf falls on the wet soil, the buds that are produced in the notches along the leaf will develop into new

plants by the process known as vegetative propagation.

6). On maturation sporangia of Rhizopus bursts?

Ans When the sporangia of rhizopus bursts on maturation, the spores present inside it spread in the open environment. Then with the help of different ayer's they are carried to different places and when they land on a favorite surface they start growing and produces new organism.

2(i) Differentiate between binary & multiple fission.

Binary fission	Multiple fission
→ Two new individuals are formed from one old individual at one time.	→ Many new individuals are formed from one old individual at one time.
→ The division of nucleus and cytoplasm takes	→ Only nucleus divides initially.

place initially.

→ The axis of division can be transverse, longitudinal or any one axis as it is in simple binary fission.

→ Ex - bacteria, Euglena

followed by division of cytoplasm.

→ There is no exact axis for the fission

→ Ex :- Amoeba, Monocystis.

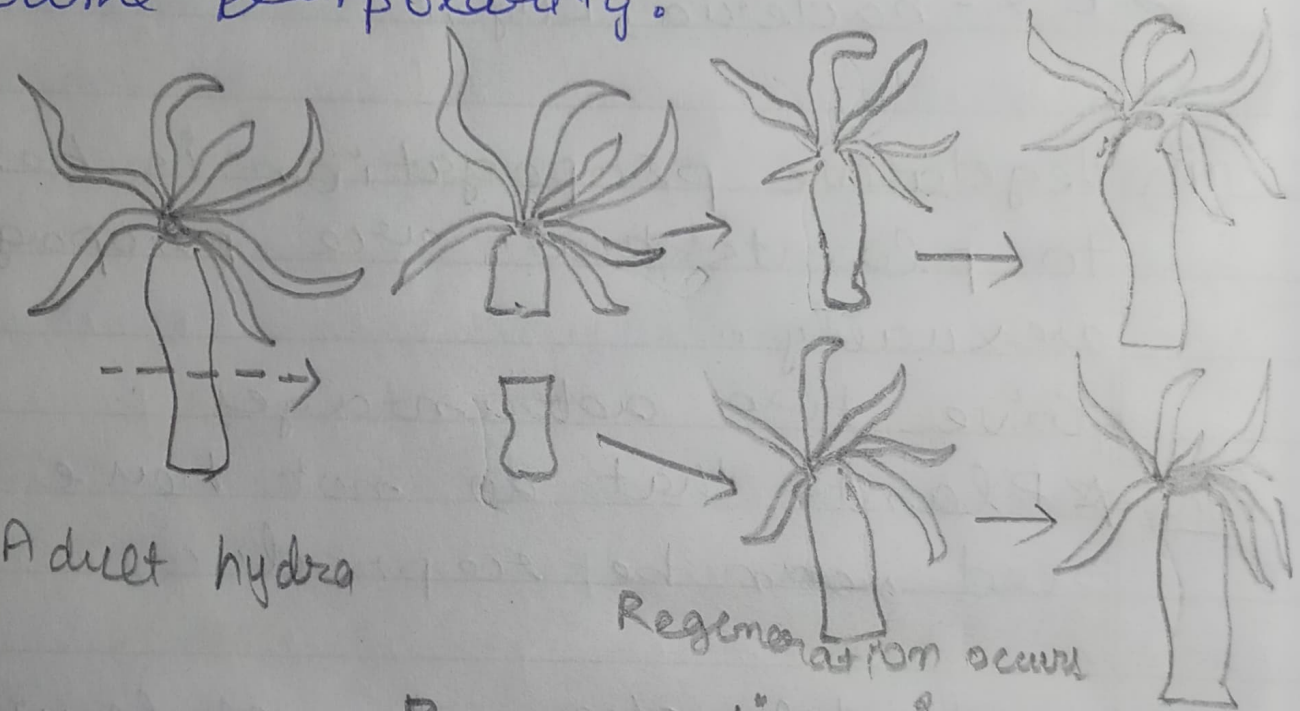
(iii) Vegetative propagation is beneficial to plants that are propagated asexually.
Give two advantages

Ans * Plants that do not have viable seed, can be reproduced.

* Desirable characters of fruit can be maintained.

3(i) With the help of a diagram demonstrate the process of regenerati as seen in Hydra.

Ans When Hydra is cut in two, the lower part develops a head, and the upper part develops a foot. A piece removed from the body of Hydra will regenerate both the head and the basal disc in the same ~~pro~~ polarity.



Regeneration in Hydra

Adult hydra

(ii) Which type of cells are used by such multicellular organisms to regenerate?

Ans Specialized cells or regenerative cells.