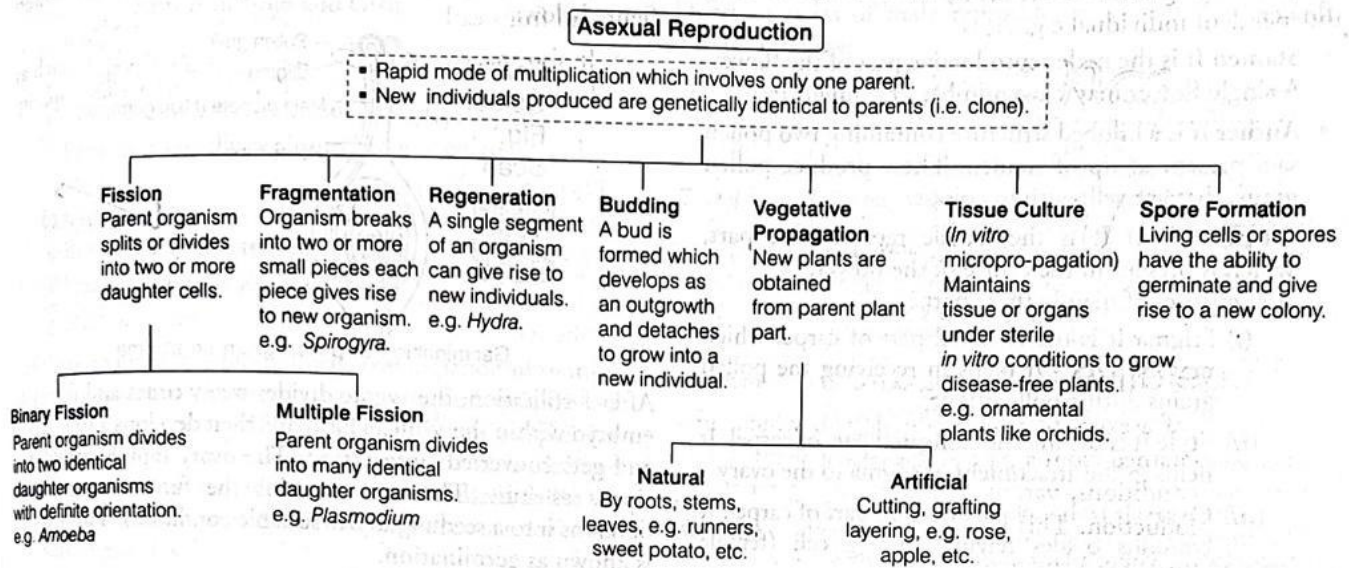


GRADE-X Ch- How Do Organisms Reproduce ?

A Summary of Modes of Asexual Reproduction



Q.1.- DNA copies generated will be similar but not identical to original give answer in reference to asexual reproduction. (2)

Q.2. What is the importance of variation in reproduction ? (2)

Q.3. Illustrate the mode of reproduction in *Rhizopus*. Label the

(a.) vegetative part

(b.) the reproductive part..... in the diagram. (1+1+1/2+1/2=3)

Q.4. (a).- Differentiate between Fragmentation and Re- generation .

(b) Name the organism that causes disease Kala azar. Mention the mode of reproduction shown by it. (2+1=3)

Q.5.



(i) Identify the organisms A and B and the mode of asexual reproduction exhibited by them . (1/2x2=1)

(ii) How will an organism be benefitted if it reproduces through spores ? (2)

(iii) Mention the two asexual methods by which hydra can reproduce. Explain briefly one such method . (1+1=2)

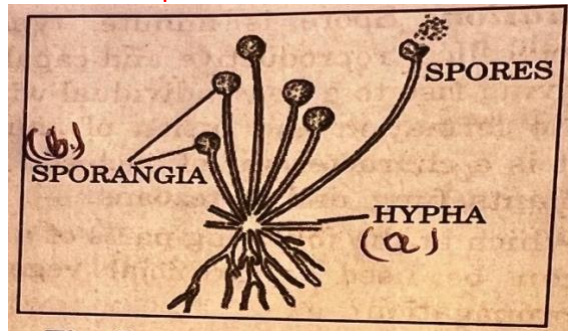
ANSWER KEY

Ans.1. Yes, there are slight variations introduced in asexual reproduction. The copying of DNA in the cell is done by certain biochemical reactions which synthesize more of genetic material. No biochemical reaction can produce 100% same results. So when there is DNA replication slight variations will come in the two copies formed.

Ans.2. Importance of variation in reproduction:

- (i) Variation is important because it leads to evolution.
- (ii) It enables the individuals to adapt to environmental changes and thus enable the survival of the species.

Ans.3. Mode of reproduction : Spore formation



Ans 4 (a).-

FRAGMENTATION	REGENERATION
The method in which multicellular organism breaks up into two or more fragments and each fragment grows into a complete individual	The growth of a whole new organism from any of its body part i.e. single segment forming new individual

(b) Leishmania causes disease kalaazar. It reproduces asexually by binary fission method.

Ans5 (i).-A – Bryophyllum reproduces by Vegetative propagation by leaf .

B – Plasmodium reproduces by Multiple fission .

(ii) Spores are tiny, spherical, asexual reproductive bodies. They are covered with a hard protective wall. This enables them to survive in unfavourable conditions. They can only germinate and produce new plant under favourable conditions thereby benefitting the organism from dyeing out.

(iii) Budding and Re- generation

Budding :- It is process in which a bud develops as an outgrowth, gets matured and detaches from the parent cell to become new individual.

Regeneration :- It takes place as specialised cells divide to form large number of cells , undergo differentiation to become various cell types and tissues.

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