



SUBJECT: BIOLOGY

CHAPTER: 2

CHAPTER NAME: REPRODUCTION IN PLANTS..

PERIOD-1

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**CHANGING YOUR TOMORROW**

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## INTRODUCTION-

- Reproduction is an integral feature of all living beings. The process by which a living being produces its own like is called reproduction.



## IMPORTANCE OF REPRODUCTION:

- Reproduction is important for each species, because this is the only way for a living being to continue its lineage. Apart from being important for a particular individual, reproduction is also important for the whole ecosystem. Reproduction helps in maintaining a proper balance among various biotic constituents of the ecosystem. Moreover, reproduction also facilitates evolution because variations come through reproduction; over several generations.



## **TYPES OF REPRODUCTION:**

There are two main types, viz. asexual and sexual reproduction.

**Asexual Reproduction:** When a single parent is involved and no gamete formation takes place; the method is called asexual reproduction. No meiosis happens during asexual reproduction

Asexual reproduction occurs through,

Budding

Binary fission

Fragmentation.

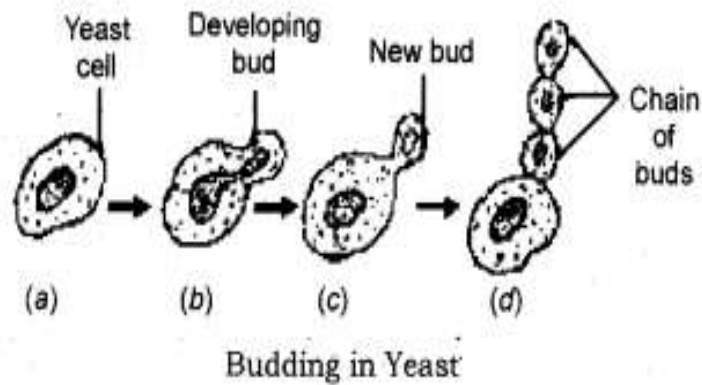
Spore formation

Vegetative Propagation



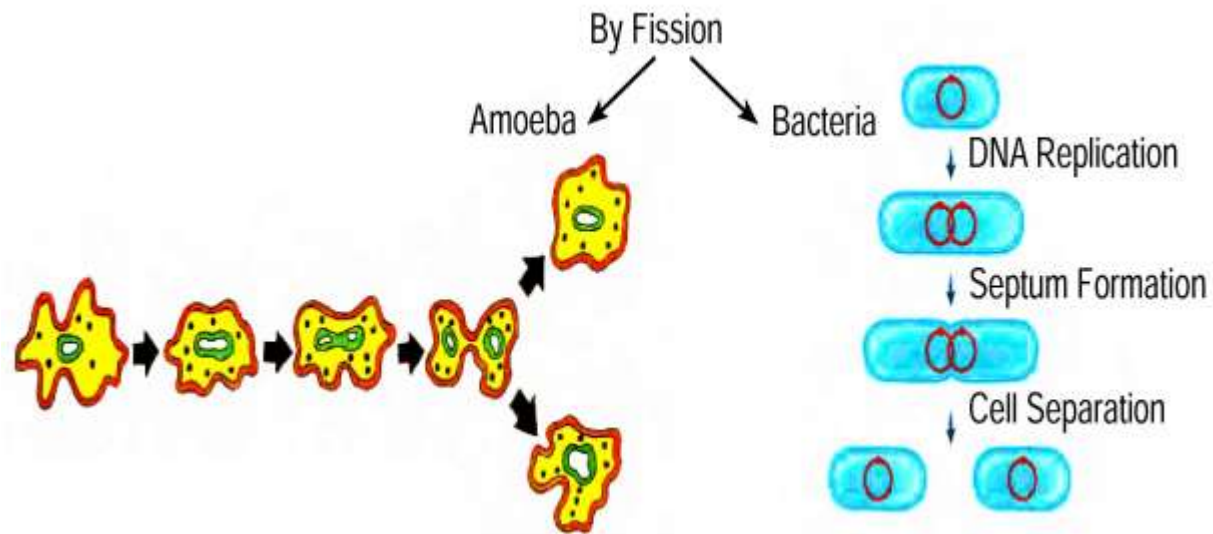
# BUDDING

- **Budding:** Seen in Yeast (a fungus). The parent yeast cell develops a protrusion or an outgrowth at its upper end. The nucleus of the parent cell divides and one of them moves into the outgrowth which grows bigger and finally separates from the parent cell to lead an independent existence. Very often if the conditions are highly favorable, a chain of buds is formed.



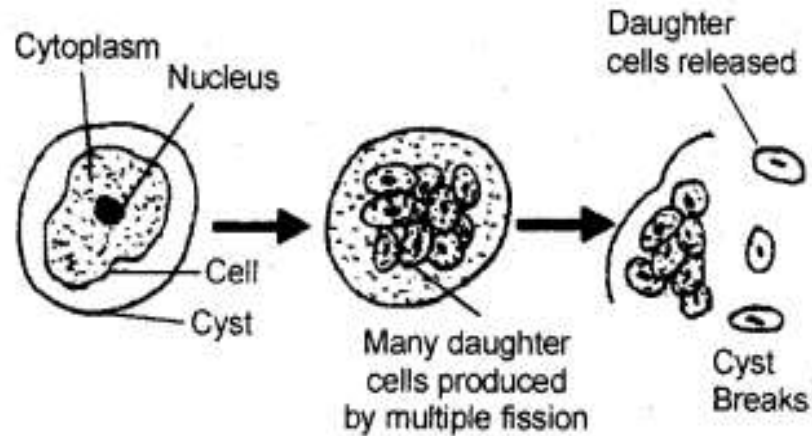
# BINARY FISSION

- **Binary Fission:** Seen in bacteria, protozoa like Amoeba, Paramecium. (In these first pseudopodia withdrawn (karyokinesis) the nucleus of the parent cell divides and then the cytoplasm divides (cytokinesis) resulting in the formation of two daughter cells).



## MULTIPLE FISSION.

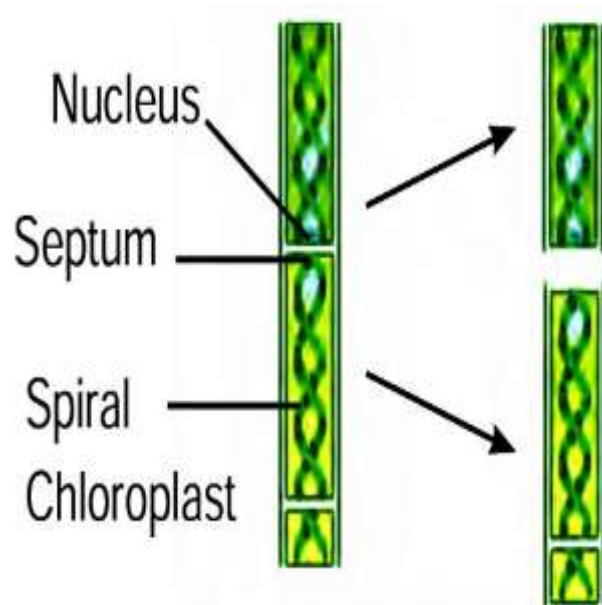
- **Multiple Fission:** Seen in Plasmodium, (a malarial parasite). In this during unfavourable conditions, the parent cell develops a thick resistant wall around itself forming a cyst. Within the wall, the cytoplasm divides many times to form many plasmodia.



Multiple Fission in Plasmodium

## FRAGMENTATION.

- **Fragmentation** -Spirogyra breaks into smaller pieces on maturation and each fragment grows into a new individual



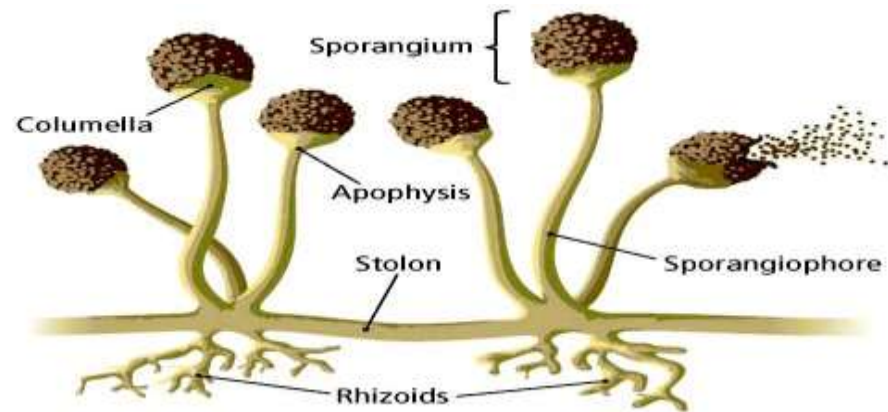
*Fragmentation in spirogyra*



- <https://www.youtube.com/watch?v=7zpz37y5DFg&t=10s>

## Spore formation

- In plants like ferns, spores are formed on the underside of the leaves. These are capable of developing into new plants when they are carried by the wind to other places with suitable conditions for growth



## HOME ASSIGNMENTS.

- Exercise Short Question No-1 and Long Answer Question No- 1,9



THANKING YOU  
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