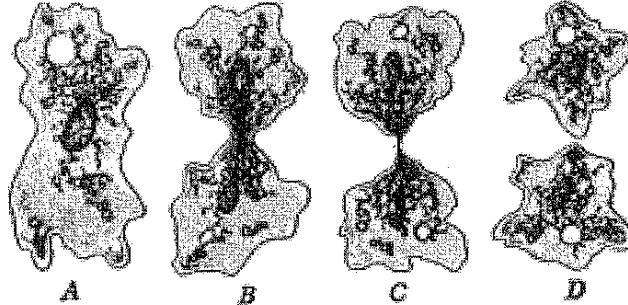


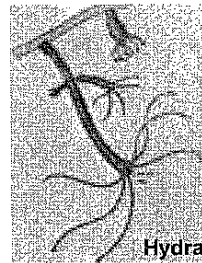


## Types of Asexual Reproduction

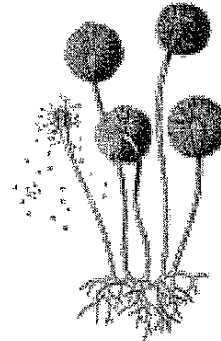
1. **Binary fission:** This is the process by which a unicellular organism divides by mitosis into two equal halves. A parent cell becomes two genetically identical offspring cells (e.g., bacteria, algae, and protists).



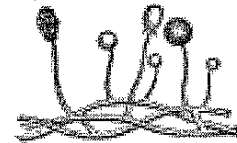
2. **Budding:** In unicellular organisms, this process is similar to binary fission, but the parent cell keeps most of the cytoplasm (yeast). In multicellular organisms, a miniature version of the organism (e.g., the bud) grows directly on the body of the adult. When it is big enough, it can detach from the parent to become an independent organism (e.g., Hydra).



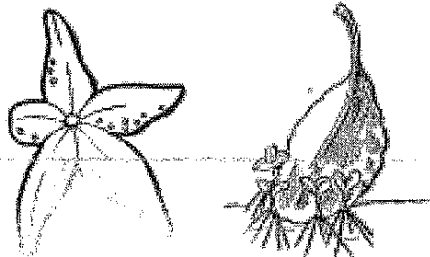
3. **Sporulation:** This is the process by which an organism produces reproductive cells (spores) by mitosis. The organism stores these cells in sporangia, which burst open to release spores that are capable of producing adult organisms (e.g., bread mould, Penicillium). Sporulation can also be a sexual type of reproduction (e.g., gametophytes).



4. **Vegetative propagation:** This is the process by which a new organism is created from the roots, stems, or leaves of plants (e.g., rhizoids in moulds, willow branches can develop roots and grow into a new tree, runners in strawberry plants can sprout roots and develop into a new plant).



5. **Regeneration:** This is the process by which a multicellular organism is divided into fragments. Each fragment becomes a new organism by regenerating the parts that are missing (e.g., flatworms, sea stars, sponges).



# Types of Asexual Reproduction

#	Name	Description	Example	Diagram