

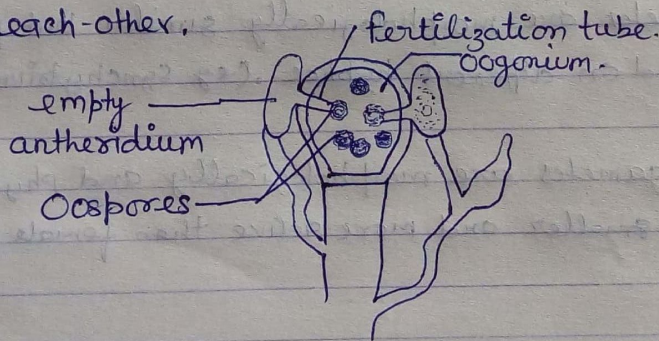
Reproduction in Fungus / Fungi =

⇒ Some common asexual spores in fungi are zoospores (e.g. *Achlya*, *Pythium*, *Phytophthora*), chlamydozoospores (e.g. *Ustilago*), Oidia (e.g. *Collybia*, *Coprinus*) and aplanospores (e.g. *Mucor*, *Rhizopus*, *Pilobolus*).

⇒ Except only the class *Zygomycetes*, sexual reproduction occurs in all the groups of fungi. The process is completed by three distinct phases.

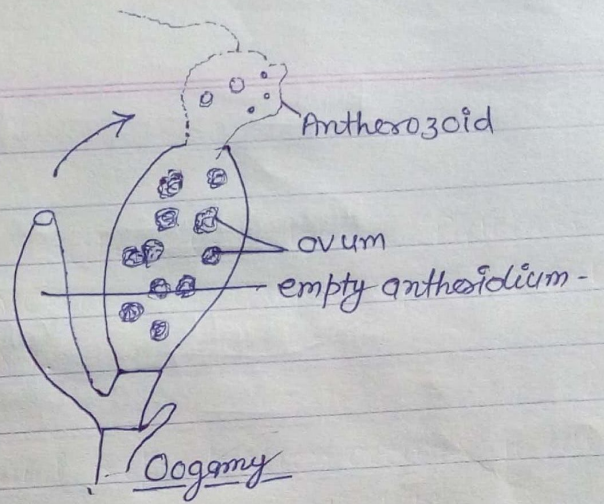
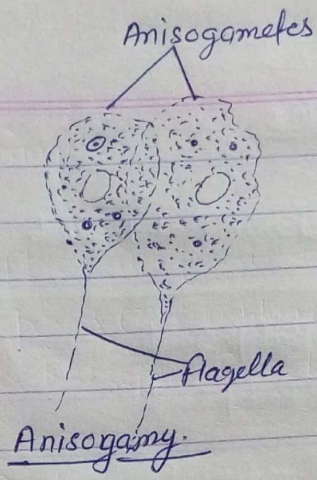
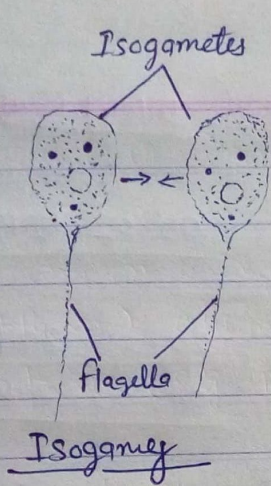
(a) - Plasmogamy (b) - Karyogamy (c) - Meiosis.

⇒ Plasmogamy is the process in which two compatible gametes protoplast or sex cell takes place where two compatible nuclei come close to each other.



Gametangial Contact:

- ⇒ Karyogamy is the second step where fusion of two nuclei from two fusing gametes takes place and a diploid zygote nucleus is formed.
- ⇒ Meiosis comes just after karyogamy. Here reduction division takes place in the diploid nucleus and haploid stage is reestablished.
- ⇒ The compatible nuclei are brought together by plasmogamic copulation in which fusion of two naked motile gametes takes place.
- ⇒ Depending on the nature and structure of fusing gametes they may be known as isogamy, anisogamy and oogamy.
- ⇒ In isogamy the fusing gametes are morphologically similar but physiologically different and they also formed on different hyphae. (eg. Synchronium, Etenaria)
- ⇒ Anisogamy called, when gametes are morphologically and physiologically different. like male gamete is smaller and more active than female gamete. (eg. Allomyces).
- ⇒ Oogamy is the condition when female gamete (ovum) is non motile and male gamete (antherozoid) is motile, which born on special hyphae called oogonium and antheridium respectively.



Planogametic copulation