How do Organisms Reproduce?

CHAPTER

📥 TRY YOURSELF

ANSWERS

- 1. Reproduction is a process by which living organisms are able to produce young ones of their own kind.
- DNA copying or DNA replication produce similar copies of blue print involved in the process of reproduction.
- Some examples of fission include bacteria, yeasts, diatoms, mycoplasmas, *Amoeba, Paramecium, etc.*
- **4.** Differences between binary fission and multiple fission are as follows:

S. No.	Binary fission	Multiple fission
(i)	The parent organism splits to form two new organisms, <i>e.g.</i> , <i>Amoeba, Paramecium</i> .	The parent organism splits to form many new organisms <i>e.g.,</i> <i>Plasmodium</i> .
(ii)	The nucleus of the parent body divides only once to produce two nuclei.	The nucleus of the parent body divides repeatedly to produce many nuclei.

Fragmentation - Spirogyra and starfish
Regeneration - Hydra and Planaria
Budding - Hydra and yeast

- 6. Regeneration was first reported by Trembley (1740) in *Hydra.*
- **7.** Budding is one of the method of asexual reproduction where a bulb-like projection called the bud, is formed on the parent body.
- During the growth of the fungus, *Rhizopus*, small rounded, bulb - like structures develop at the top of the erect hyphae. Such structures are called sporangia.
- **9.** A spore is a single or several celled reproductive structure that detaches from the parent and gives rise, directly or indirectly, to a new individual.
- The layering method is used for the propagation of plants like jasmine, strawberry, raspberry, lemon, guava, *Hibiscus* (China rose) and *Bougainvillea*.

- **11.** Grafting is a method in which the cut stems of two different plants (one with roots and other without roots) are joined together in such a way that the two stems join and grow as a single plant. This new plant will have the characteristics of both the original plants. It has been used in raising superior quality plants of mango, guava, pear, rubber, etc.
- It is the development of an organism from an unfertilised egg. It occurs in rotifers, arthropods, some vertebrates, some birds, etc.
- **13.** Tissue culture
- **14.** The motile germ cell is called the male gamete and the germ cell containing the stored food is called the female gamete.
- **15.** Due to fusion of germ cells from two different individuals, a single celled diploid structure, called zygote is formed and original number of chromosomes and DNA is restored.
- **16.** Stamens and carpels constitute the essential parts of a flower while sepals and petals form the non-essential parts of a flower.
- 17. Pollen grain
- 18. Double fertilisation is mechanism involving two acts of fertilisation. One male gamete fuses with two polar nuclei; known as triple fusion and the other male gamete fuses with egg cell, known as syngamy.
- 19. Vagina
- **20.** Seminal vesicles, prostate gland and Cowpers's gland.
- **21.** Fallopian tube
- 22. Population explosion is the rapid growth of human population. Two main causes of human population explosion are: rapid decline in death rate and increase in longevity.
- **23.** NACO-National AIDS Control Organisation.

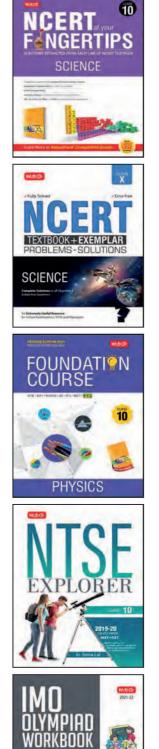
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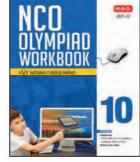


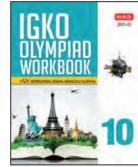
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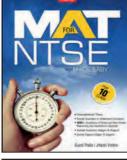


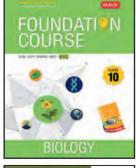
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