
📘 Chapter 8 – How do Organisms Reproduce? (30 Important Q&A)

Basic Concepts

Q1. Define reproduction.
Ans: Biological process by which organisms produce new individuals of the same species.

Q2. Why is reproduction important?
Ans: Ensures **continuity of species** and transfer of **hereditary information** to the next generation.

Q3. Name the two types of reproduction.
Ans: Asexual and **Sexual** reproduction.

Q4. Define asexual reproduction.
Ans: Reproduction involving a **single parent**, producing genetically identical offspring.

Q5. Define sexual reproduction.
Ans: Reproduction involving **two parents** and fusion of gametes, producing genetically varied offspring.

Asexual Reproduction

Q6. Name the types of asexual reproduction.
Ans: Binary fission, budding, spore formation, vegetative propagation, fragmentation.

Q7. Example of binary fission:
Ans: Amoeba, Paramecium.

Q8. Example of budding:
Ans: Hydra, yeast.

Q9. Example of spore formation:
Ans: Fungi like Rhizopus.

Q10. Example of vegetative propagation:
Ans: Potato (tuber), ginger (rhizome), sugarcane (stem cutting).

Sexual Reproduction in Plants

Q11. Define pollination.
Ans: Transfer of pollen grains from anther to stigma of a flower.

Q12. Types of pollination:

Ans: Self-pollination and **cross-pollination**.

Q13. Define fertilization.

Ans: Fusion of male gamete (pollen) and female gamete (ovule) to form zygote.

Q14. Example of self-pollination:

Ans: Pea, wheat.

Q15. Example of cross-pollination:

Ans: Hibiscus, mustard.

Sexual Reproduction in Animals

Q16. Define fertilization in animals:

Ans: Fusion of sperm and egg to form zygote.

Q17. Types of fertilization:

Ans: Internal and external fertilization.

Q18. Example of internal fertilization:

Ans: Human, frog (terrestrial animals).

Q19. Example of external fertilization:

Ans: Fish, frog (aquatic animals).

Q20. Zygote develops into:

Ans: Embryo, then grows into a new individual.

Reproductive Strategies

Q21. Advantages of asexual reproduction:

Ans: Fast, requires only one parent, simple.

Q22. Disadvantages of asexual reproduction:

Ans: No genetic variation; offspring may be affected by diseases affecting parent.

Q23. Advantages of sexual reproduction:

Ans: Genetic variation, adaptation to changing environment.

Q24. Disadvantages of sexual reproduction:

Ans: Requires two parents, slower, more energy-consuming.

Q25. Fertilization in humans occurs in:

Ans: Fallopian tube (oviduct).

Human Reproduction

Q26. Male reproductive organs:
Ans: Testes, vas deferens, urethra, penis.

Q27. Female reproductive organs:
Ans: Ovaries, fallopian tubes, uterus, vagina.

Q28. Male gamete:
Ans: Sperm.

Q29. Female gamete:
Ans: Ovum (egg).

Q30. Gestation period in humans:
Ans: Approximately 9 months (280 days).