

CBSE Class 8 Science
NCERT Exemplar Solutions
CHAPTER 9
Reproduction in Animals

SHORT ANSWER QUESTIONS

16. Fill up the blanks with the terms given below:

body, asexual, binary, single, nucleus.

Amoeba is a _____ celled organism. It reproduces by _____ reproduction. The process of reproduction begins by the division of its _____ into two. This is followed by the division of its _____ into two. This type of reproduction is called _____ fission.

Ans. Single, asexual, nucleus, body, binary

17. The term metamorphosis is not used while describing human development. Why?

Ans. In human beings, body parts of an adult are present from the time of birth itself. Whereas, in metamorphosis, the body parts of the adult are different from those present at the time of birth.

18. Mother gives birth to a baby but the baby has characters of both parents. How is this possible?

Ans. Although mother gives birth to a child, fertilisation involves two opposite gametes, one from the mother and the other from father. The zygote, therefore has both father and mother's contribution (genes). Since the zygote develops into the baby it has characters of both the parents.

19. How is reproduction in *Hydra* different from that in *Amoeba*?

Ans. *Hydra* reproduces by budding where an outgrowth arises from the parent and develops

into a new individual. *Amoeba* reproduces by binary fission in which the division of nucleus is followed by division of the cell resulting into two individuals.

20. State whether the following statements are True or False. If false, correct the statement:

- (a) External fertilisation can occur both in water and on land.
- (b) The eggs of fish are covered by hard shells for protection.
- (c) Human egg has a head, middle piece and tail.
- (d) In adult human female, a single mature egg is released into an oviduct every month.

Ans. (a) F; External fertilisation occurs only in water.

(b) F; The eggs of fish are covered by a jelly-like layer for protection.

(c) F; Human sperm has a head, middle piece and tail.

(d) T

21. Why only male gametes have a tail?

Ans. Because they are motile and reaches the non-motile female gamete by movement with the help of tail.

22. What does Fig. 9.1 represent?

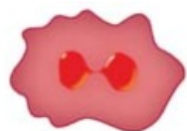


Fig. 9.1

Ans. The figure shows an *Amoeba* undergoing binary fission with a dividing nucleus.

23. Observe the figure given as Fig. 9.2 and answer the questions that follow.

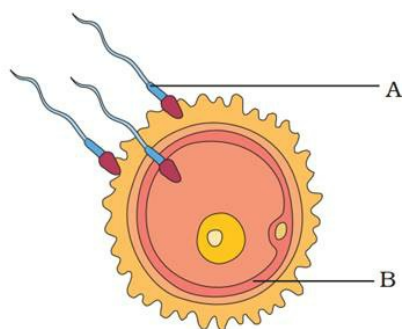


Fig. 9.2

(a) Label A and B.

(b) Identify the process.

(c) What happens during this process and what is formed?

Ans. (a) A-sperm; B-ovum (egg)

(b) Fertilisation

(c) Sperm nucleus fuses with the egg nucleus to form the zygote.