

INDIAN SCHOOL AL WADI AL KABIR



Class: VIII	Department: SCIENCE 2022-2023	Date of Completion:20/11/2022
TEXTBOOK- Q & A	Chapter: REPRODUCTION IN ANIMALS	Note: A4 FILE FORMAT
NAME OF THE STUDENT	CLASS & SEC:	ROLL NO.

1. Explain the importance of reproduction in organisms.

Answer:

Reproduction is a vital phenomenon on this planet earth which is essential for the existence and continuity of life and species on it, generation after generation.

2. Describe the process of fertilisation in human beings.

Answer:

In the process of fertilisation, sperms come in contact with an ova (egg). One of the sperms may fuse with the egg. The nuclei of the sperm and the egg fuse to form a single nucleus resulting in the formation of a fertilised egg called a zygote. In human being, fertilisation takes place inside the female body, known as internal fertilisation.

- 3. Choose the most appropriate answer.
- (a) Internal fertilisation occurs

(i) in the female body.

- (ii) outside the female body.
- (iii) In the male body.
- (iv) Outside male body.

(b) A tadpole develops into an adult frog by the process of:

(i) fertilisation

(ii) metamorphosis

- (iii) embedding
- (iv) budding

(c) The number of nuclei present in a zygote is:

- (i) none
- (ii) one
- (iii) two
- (iv) four

4. Indicate whether the following statements are True (T) or False (F).

- 1. Oviparous animals give birth to young ones. False
- 2. Each sperm is a single cell. **True**
- 3. External fertilisation takes place in the frog. **True**
- 4. A new human individual develops from a cell called a gamete. False

- 5. Egg laid after fertilisation is made up of a single cell. True
- 6. Amoeba reproduces by budding. False
- 7. Fertilisation is necessary even in asexual reproduction. False
- 8. Binary fission is a method of asexual reproduction. True
- 9. A zygote is formed as a result of fertilisation. **True**
- 10. An embryo is made up of a single cell. False

5. Give two differences between a zygote and a Foetus.

Zygote	Foetus
(i) It is a single cell, i.e., it contains only one cell.	(i) It is multicellular, i.e., it contains many cells.
(ii) It is formed by the fusion of male gamete or sperm and female gamete or ova (egg).	(ii) It is formed by the repeated division of the zygote.

6. Define asexual reproduction. Describe two methods of asexual reproduction in animals. **Answer:**

The mode of reproduction in which only a single parent is involved is called asexual reproduction. In this type of reproduction, sex cells (gametes) are not produced and no fusion of gametes takes place for the production of a zygote or offspring. Asexual reproduction takes place in Amoeba, Hydra, yeast, starfish, sponges, etc. There are mainly two methods of asexual reproduction:

(i) Binary fission: In binary fission, a single parent cell is divided into two equal individual cells as in Amoeba. It divides into two by division of their bodies, each of them gets one nucleus and develops into a separate individual. The figure given below shows how binary fission occurs in Amoeba.



Binary fission in Amoeba

(ii) **Budding: In budding, the organism develops a bulge called bud which further develops into an adult organism and separates itself from the parent body to lead an independent life. This type of reproduction is shown in Hydra. The following figure shows the budding**

in Hydra.



Budding in Hydra

7. In which female reproductive organ does the embryo get embedded? **Answer-Uterus**

8. What is metamorphosis? Give examples.

Answer: The transformation of a larva into an adult involving sudden and abrupt changes in the body of an animal during the life cycle of an invertebrate or amphibian is called metamorphosis. For example, frog and butterfly.

9. Differentiate between internal fertilisation and external fertilisation.

Answer:

Internal Fertilisation	External Fertilisation
(1) The fusion of male gamete or sperm and female gamete or ova occurs inside the	(1) The fusion of male gamete and female gamete takes place outside the body of a
body of a female partner, such as human	female partner, such as in frogs, fish, and
beings, birds, and mammals.	starfish.
(ii) The female partner lays either fertilised	(ii) The female partner discharges
eggs or a fully grown young one.	unfertilised eggs.
(iii) Offsprings have a high chance of	(iii) Offsprings have a low chance of
survival.	survival.

Question 10. Complete the crossword puzzle using the hints given below. Across

1. The process of the fusion of the gametes.

6. The type of fertilisation in a hen.

7. The term used for bulges observed on the sides of the body of Hydra.

8. Eggs are produced here.

Down

2. Sperms are produced in these male reproductive organs

3. Another term for the fertilised egg.

- 4. These animals lay eggs.
- 5. A type of fission in Amoeba.



Answer:



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