

Chapter-9 Reproduction in Animals

1. Explain the importance of reproduction in organisms.

Reproduction is very important as it ensures the continuation of similar kinds of individual, generation after generation.

2. Define the process of fertilisation in human beings.

The process of reproduction is the fusion of sperm and an ovum. When sperms come in contact with an egg, one of the sperm may fuse with the egg. Fusion of the egg and the sperm is called fertilisation. During fertilisation, the nuclei of the sperm and the egg fuse to form a single nucleus. This results in the formation of a fertilised egg or zygote.

3. Give two differences between a zygote and a foetus.

Zygote.

- i. Zygote is a fertilised egg formed by the fusion of sperm and egg*
- ii. It is a uninucleate structure formed in oviduct.*

Foetus.

- iii. It is the stage of the embryo in which all the body parts are identifiable is called foetus.*
 - iv. It is a multicellular structure formed after the development of embryo.*
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4. Define asexual reproduction. Describe two methods of asexual reproduction in animals.

It is the type of reproduction in which only a single parent is involved is called asexual reproduction.

It can take place by following methods:

Budding:-

In development of hydra, one or more bulges. These bulges are the developing new individuals. And they are called buds. Through bud formation, This type of asexual reproduction is called budding.

Yeast is also reproduced by budding formation.

Binary Fision:-

Amoeba is a single cell organism. It begins the process of reproduction by the division of its nucleus into two nuclei. Finally, two amoeba are produced from one parent amoeba. This type of asexual reproduction in which an animal reproduces by dividing into two individuals is called binary fission.

5. In which female reproductive organ does the embryo get embedde?

The embryo gets embedded in the wall of the uterus for further development.

6. What is metamorphosis? Give examples.

The transformation of the larva into an adult through drastic changes is called metamorphosis. Some examples are:

- i. In the life cycle of silkworm, egg turns into larav, larva turns into pupa and pupa turns into adults. The catterpillar or the pupa of silkworm looks very different from the adult moth.*

- ii. *The different stages of frog, egg turns into tadpole turns into adult. The tadpoles transform into adult capable of jumping and swimming.
The features that are present in the adult are not found in the young ones.*
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7. Differentiate between internal fertilisation and external fertilisation.

External fertilisation

- i. *Fertilisation which takes place outside the female body is called external fertilisation.*
- ii. *It is very common in aquatic animals such as fish, starfish etc.*

Internal fertilisation

- iii. *Fertilisation which takes place inside the female body is called internal fertilisation.*
- iv. *Internal fertilisation occurs in many animals including humans, cows, hens and dogs etc.*