



## CLASS - VIII SCIENCE NOTES SEPTEMBER

### 6. Reproduction in Animals

#### I. Assertion and Reasoning Type Questions:

**Note: Mark the correct choice as.**

OPTION A - Both assertion and reason are true and reason is the correct explanation of assertion.

OPTION B - Both assertion and reason are true but reason is not the correct explanation of assertion.

OPTION C - Assertion is true but reason is false.

OPTION D - Assertion is false but reason is true.

1. Assertion: Reproduction is essential for continuation of species.

Reason: Organisms cannot survive without reproduction.

**Ans - c - A is true but R is False**

2. Assertion: Hens and Ducks are called Oviparous animals.

Reason: Oviparous animals lay eggs.

**Ans - a - Both A and R are true and R is the correct explanation of the assertion.**

#### II. Answer the following Questions:

1. **Explain the importance of reproduction in organisms.**

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

2. **Describe the process of fertilisation in human beings.**

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 zygote. In human being, the fertilisation takes place inside the female body, known as internal fertilisation.

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

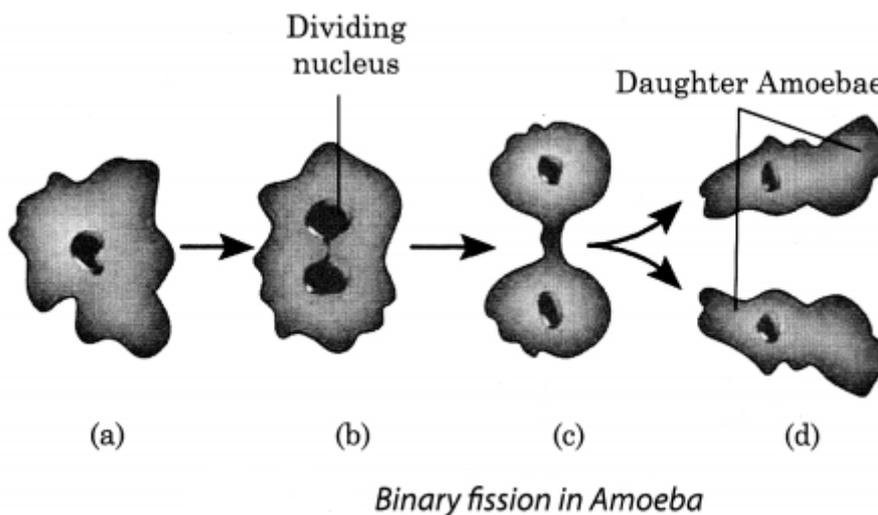
Zygote	Foetus
(i) It is a single celled, i.e., it contains only one cell.	(i) It is multicelled, i.e., it contains many cells.
(ii) It is formed by the fusion of male gamete or sperm and female gamete or ova (egg).	(ii) It is formed by the repeated division of the zygote.

**4. Define asexual reproduction. Describe two methods of asexual reproduction in animals.**

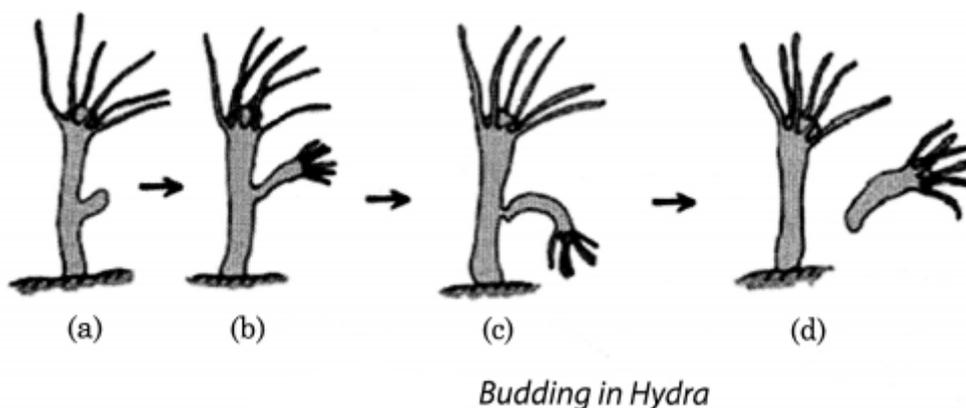
The mode of reproduction in which only a single parent is involved is called asexual reproduction. In this type of reproduction, sex cells (gametes) are not produced and no fusion of gametes takes place for the reproduction of zygote or offsprings. Asexual reproduction takes place in Amoeba, Hydra, yeast, 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 separate individual. The figure given below shows how binary fission occurs 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 budding in Hydra.



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

Uterus

**6. What is metamorphosis? Give examples.**

The transformation of 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. Example, frog and butterfly.

**7. Differentiate between internal fertilisation and external fertilisation.**

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