

# VIDYA BHAWAN BALIKA VIDYAPEETH

## STUDY MATERIAL SCIENCE CLASS-VIII

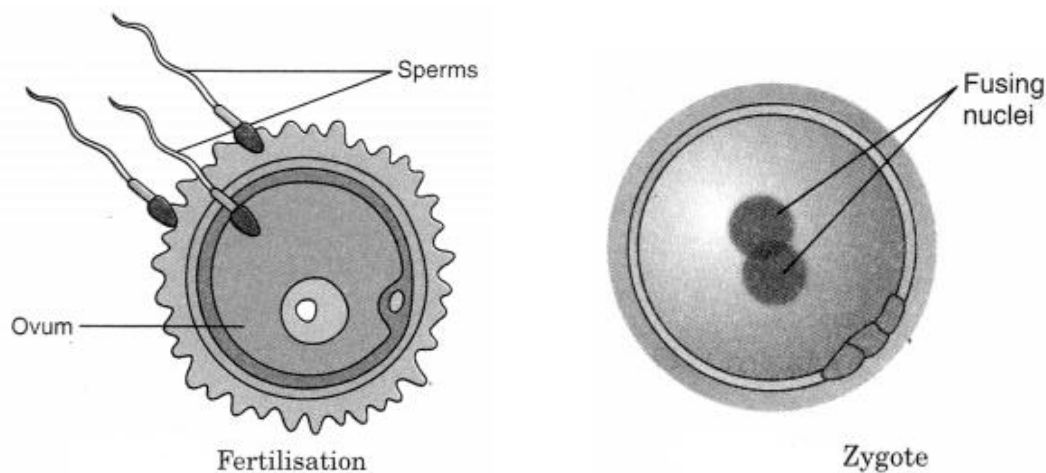
Date 27/07/2020

Teacher : Poonam Kumari

### ► 9. Reproduction in Animals

#### Fertilization :

The fusion of the ovum and the sperm is called fertilisation. i.e., When sperms come in contact with an egg, one of the sperm may fuse with the egg. Such fusion of the egg and the sperm is called fertilization.



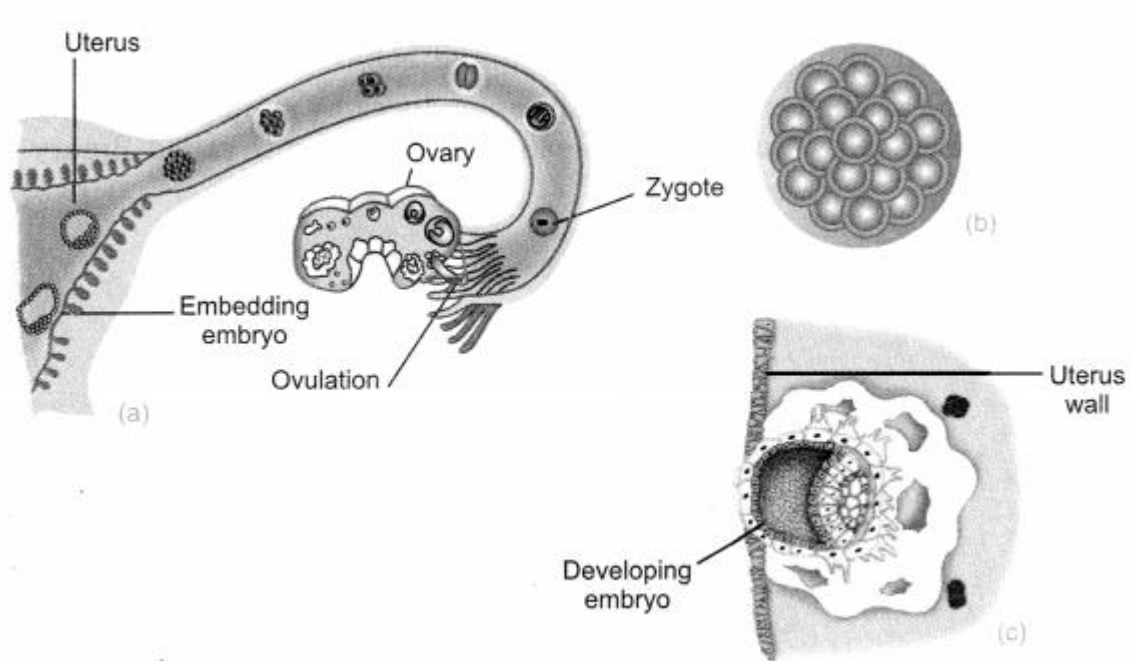
Internal Fertilization : Fertilization which takes place inside the female body is called internal fertilization. Internal fertilization occurs in many animals like humans, cows, etc.,

External Fertilization : Fertilization which takes place outside the female body is called external fertilization.

Zygote : During fertilization, the nuclei of the sperm and the egg fuse to form a single nucleus. This results in the formation of a fertilized egg or zygote.

The process of fertilization is the meeting of an egg cell from the mother and a sperm cell from the father. So, the new individual inherits some characteristics from the mother and some from the father.

The zygote divides repeatedly to give rise to a ball (mass) of cells. The cells then begin to differentiate into various tissues. This developing structure is called an **embryo**.



*Fig.(a) Zygote formation and development of an embryo from the zygote*

*Fig.(b) Ball of cells (enlarged) Fig.(c) Embedding of the embryo in the uterus (enlarged)*

The embryo gets implanted within the wall of the uterus, i.e., endometrium for further development.

► **ASSIGNMENT :**

1. What do you mean by fertilization? Explain with diagram.
2. What is internal & external fertilization?
3. Define zygote.
4. Why does the new individual inherits some characteristics from their parents?
5. What is embryo?