CHAPTER-9 REPRODUCTION IN ANIMALS

Subject –Science Class-VIII

 HAND OUT – MODULE -2

FERTILISATION

* The fusion of a sperm with an egg 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 called Zygote.

TYPES OF FERTILISATION

1. INTERNAL FERTILISATION

2. EXTERNAL FERTILISATION

 INTERNAL FERTISATION

* Fertilisation which takes inside the female body is called internal fertilisation.
* Example- Humans ,Cows ,Dogs ,and hens etc

EXTERNAL FERTILISATION

* The type of fertilisation in which the fusion of a male and a female gamete takes place outside the body of the female is called external fertilisation.
* Example- 1 Aquatic animals such as fish,star fish.

 2 Frog etc.

* IVF OR in vitro fertilisation
* The fertilisation of an egg that takes place outside the body in a test tube or any other apparatus is known as IVF or in vitro fertilisation.
* TEST TUBE BABIES
* In this technique freshly released egg and sperms are put together for a few hours for IVF. In case fertilisation occurs, the zygote is allowed to develop for about a week and then placed in the mother’s uterus. Complete development takes place in the uterus and the baby is born like any other normal baby. Babies born through this technique are called test-tube babies.

DEVELOPMENT OF EMBRYO

* Fertilisation results in formation of zygote which begins to develop into an embryo.
* The zygote divides repeatedly to give rise to a ball of cells.
* The cells then begin to form groups that develop into different tissues and organs of the body.
* This developing structure is termed an embryo.
* The embryo gets embedded in the wall of the uterus for further development.
* The embryo continues to develop in the uterus.
* It gradually develops body parts such as hands, legs, head, eyes ,ears etc.

\*The stage of the embryo in which all the body parts can be identified is called a foetus.

\* When the development of the foetus is complete, the mother gives birth to the baby.

INTERNAL FERTILISATION IN HEN

* Internal fertilisation takes place in hen also.
* Soon after fertilisation ,the zygote divides repeatedly and travel down the oviduct.
* As it travels down, many protective layers are formed around it.
* The hard shell that of egg is one such protective layer.
* In animals which undergo external fertilisation, development of the embryo takes outside the female body.
* The embryos continue to grow within their egg coverings.
* After the embryos develop , the egg hatch.



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