NCERT SOLUTIONS CLASS - 8TH





Class : 8th Subject : Science Chapter : 9 Chapter Name : REPRODUCTION IN ANIMAL

Q1 Explain the importance of reproduction in organisms.

Answer. 1. Reproduction is essential for the continuation of a species.2. It ensures the continuation of similar kinds of individuals, generation after generation.

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Q2 Describe the process of fertilisation in human beings

Answer. There is sexual reproduction in human beings. Male reproductive organs produce sperms (male gametes) while the female gametes produce ova (female gametes). The sperms are ejected inside female bodies where they fuse with ovum and forms zygote(called internal fertilization). The single celled zygote begins to develop into an embryo which attaches to the female uterus wall. The embryo further multiples into many cells and develops further into a small baby called foetus.

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Q3 Choose the most appropriate answer.

(a) Internal fertilisation occurs

(i) in female body.

(ii) outside female body.

(iii) in 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

Answer. (a) (i) in female body (b) (ii) metamorphosis. (c) (iii) two (fused nuclei)

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Q4 Indicate whether the following statements are True (T) or False (F).

(a) Oviparous animals give birth to young ones. ()

(b) Each sperm is a single cell. ()

(c) External fertilisation takes place in frog. ()

(d) A new human individual develops from a cell called gamete. ()

(e) Egg laid after fertilisation is made up of a single cell. ()

(f) Amoeba reproduces by budding. ()
(g) Fertilisation is necessary even in asexual reproduction. ()
(h) Binary fission is a method of asexual reproduction. ()
(i) A zygote is formed as a result of fertilisation. ()
(j) An embryo is made up of a single cell.()
Answer. (a) Oviparous animals give birth to young ones(F)
(b) Each sperm is a single cell(T)
(c) External fertilization takes place in frog(T)
(d) A new human individual develops from a cell called gamete(F)
(e) Egg laid after fertilization is made up of a single cell(T)
(f) Amoeba reproduces by budding(F)
(g) Fertilization is necessary even in asexual reproduction(F)
(h) Binary fission is a method of asexual reproduction(T)
(i) A zygote is formed as a result of fertilization(T)
(j) An embryo is made up of a single cell(F)

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Q5 Give two difference between a zygote and a foetus.

Answer.

Zygote	Embryo
Zygote is single cellular.	Embryo is multi-cellular.
No well defined body parts.	Has well defined limbs and other body parts.
It is formed during fertilization when sperm fuses into ovum.	Embryo formation is a post fertilization process in which zygote multiples into multi-cellular body.

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Q6 Define asexual reproduction. Describe two methods of asexual reproduction in animals.

Answer. Asexual reproduction is a mode of reproduction in which only one parent is involved to reproduce offspring. In asexual reproduction, the offsprings produced are exact copies of theirIt is generally observed in very small sized organisms. Binary fission, Budding, Fragmentation etc.are the examples of asexual reproduction.

1. Budding: In this mode, a part of the organism starts bulging out. Slowly it grows and develops into a separate individual. Examples: Hydra, yeast.

2. Binary Fission: It is a type of asexual reproduction in which a single cell divides into twohalves. Organisms that reproduce through binary fission are bacteria and Amoeba.

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Q7 In which female reproductive organ does the embryo get embedded

Answer. In walls of the uterus. The embryo, once attached to uterus gradually develops various body parts such as hands, legs, head, eyes, etc into an embryo.

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Q8 What is metamorphosis? Give examples.

Answer. Metamorphosis is a biological process in which a larvatransforms into an adult. It involves sudden and abrupt changes in the body structure of the animal by cell grov.th and differentiation. It is generally observed in amphibians (e.g. frogs) and insects (e.g.butterflies) etc.The life cycle of a frog has three life stages.

Egg>>>> Tadpole>>>> Adult

1. Eggs: Eggs are the result of external fertilization which transform into fish like tadpoles.

2. Tadpoles: Tadpole has gills, small mouth and fish like tail to swim inside lakes and

ponds.

3. Frog: Tadpoles grows and transform into a small frog which is amphibian by nature.

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Q9 Differentiate between internal fertilisation and external fertilisation.

Answer.

Zygote	Embryo
Zygote is single cellular.	Embryo is multi-cellular.
No well defined body parts.	Has well defined limbs and other body parts.
It is formed during fertilization when sperm fuses into ovum.	Embryo formation is a post fertilization process in which zygote multiples into multi-cellular body.
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Q10 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 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 in vitro fertilisation.
- 4. These animals lay eggs.
- 5. A type of fission in amoeba



Answer.



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