Reproduction in Animals

Improve your learning

Q. 1. B. Differentiate between:

Sexual reproduction and asexual reproduction

Answer :

Sexual reproduction	Asexual reproduction
• Requires both parents i.e. male and female.	• Requires only one parent.
• Contains genetic information from both of the parents.	• Contains genetic information from one parent.
• Fusion of gametes takes place.	• No fusion of gametes occurs
• Example: in human	• Example: in hydra

Q. 1. B. Differentiate between:

Gametes and zygote

Answer :

Gametes	Zygotes
• Chromosomes are haploid in number i.e., 23.	• Chromosomes are diploid in no. i.e., 46.
• No fusion of male and female Germ cells occur	• Fusion of male and female germ cell occurs
• No new individual is formed unless the two games fuses (in sexually reproducing one)	• New individuals are formed from zygotes.

Q. 1. C. Differentiate between:

External fertilization and internal fertilization

Answer :

External fertilization	Internal fertilization
• Fusion of gametes occurs inside organisms body.	• Fusion of gametes occurs outside body.
• Protection of zygotes is high.	• Young one's are not well protected.
• Survival of embryo is high.	• Survival is low.
• Ex: in fishes and amphibians.	• Ex: mammals.

Q. 1. D. Differentiate between:

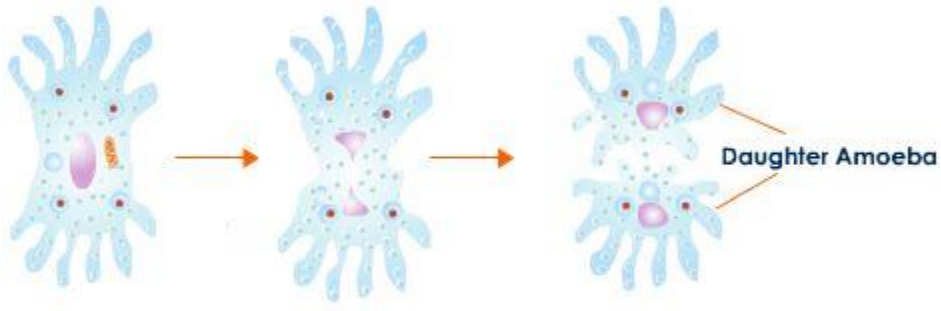
Viviparous and oviparous animals

Answer :

Viviparous organism	Oviparous organism
• Organisms do not lay eggs.	• Organisms lay eggs.
• Young one develops inside female's body.	• Young one develops outside female's body.
• Ex: birds,mammals	• Ex: fishes, amphibians

Q. 2. Compare the reproduction in Hydra and Amoeba. Note down the differences in your notebook.

Answer : Amoeba reproduces by a process known as binary fission in which parent cell divides into two equal daughter cells. Whereas in hydra reproduction occurs by budding.

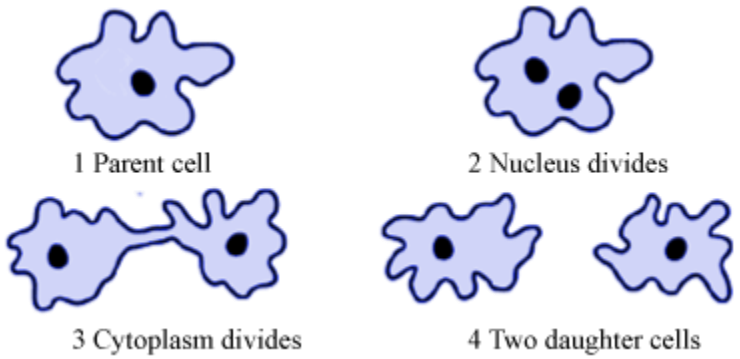


Q. 3. Why do fish and frog lay more number of eggs whereas cow and human beings usually give birth to only one at a time?

Answer : External development of young ones occurs in case of frog and fish due to which its protection from the surrounding decreases. So to cope up with the loss they lay more no. of eggs because not many have a chance to survive. Whereas in case of cow and human beings development occurs inside the mother's body and the egg is protected. So they give birth to only one at a time.

Q. 4. Can animals produce off springs even without formation of zygotes, how? Explain with suitable example.

Answer : Yes, some animals can produce offspring even without formation of zygotes. For example, in case of amoeba, the parent cell nuclei divided into two which is followed by the equal cytoplasmic division. The result is the formation of two new daughter cell from the old parent cell with each nuclei i.e., one cell containing one nuclei. These daughter cell will further behave as parent cell and it itself undergoes the same process and results in formation on new daughter cell.



Q. 5. How can you identify the animal is viviparous or oviparous.

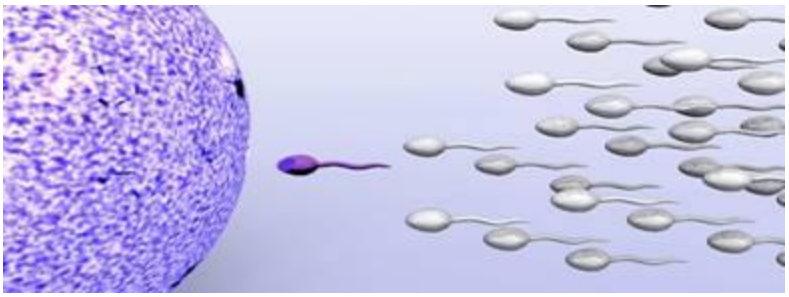
Answer : If an organisms give birth to fully developed young ones they are identified as viviparous. Whereas organism who lay eggs and is hatched in external environment are identified as oviparous. Bird's lays eggs and the further development of zygotes occur outside the parent's body and when it develops at a certain stage it hatches out. This is an example of oviparous. In case of mammals the zygotes and developed inside females body and when it attains a certain stage of development it is expelled from the female's body.

Q. 6. Who am I?

a) I am formed by the fusion of male and female gametes...
b) I am a gamete that has a tail and travel to fuse with female gamete...
c) I am a fully developed embryo inside a mother's body...

Answer : (a) Zygote

(b) Sperm

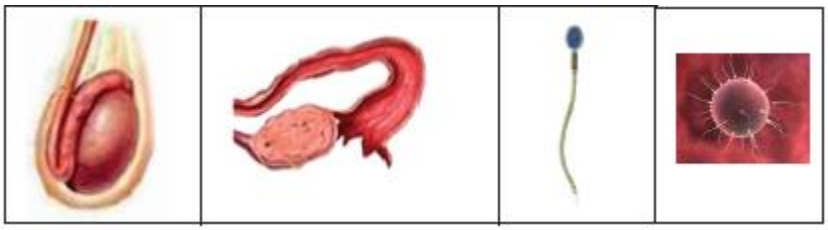


(c) Fetus or a baby

Q. 7. State the reason why most of the terrestrial animals' fertilisation takes place internally.

Answer : The environment on terrestrial land keeps on changing than that of the marine environment. So in order to increase the survival chance of the fertilization (internal environment is nearly constant) terrestrial animals' fertilization takes place internally.

Q. 8. Observe the following figures and write the functions of them.



Answer : A) testis- production of sperms.

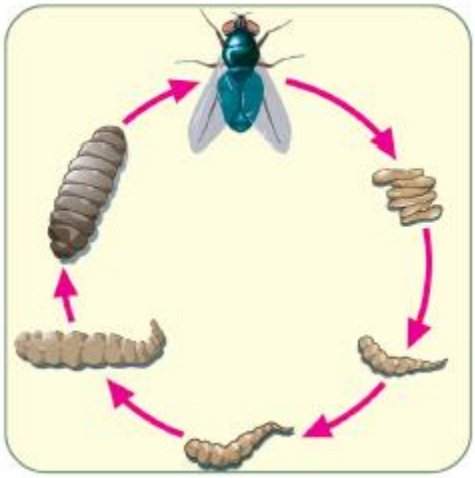
B) Fallopian tube – captures mature ova after it is released from the ovary and provides the site of fertilization.

C) Sperm – male gamete that fertilizes female gamete ova.

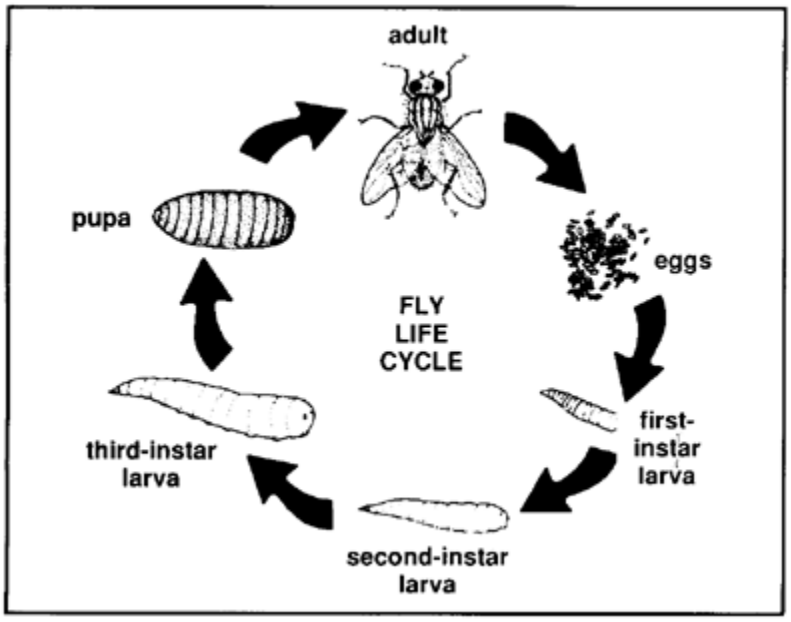
D) Fertilization – one of the sperm fertilizes ova and results in zygote formation which will further developed into young ones.

Q. 9. A. By taking help of the given words label the following life cycle?

(eggs, adult, pupa, larva)



Answer :



Q. 9. B. Explain the process of metamorphosis in housefly by taking help from in the given diagram.

Answer : Metamorphosis is the process by which the immature forms develop into an adult. The adult male and female produces gametes which are haploid (n). The gametes then fertilize and form a zygote (2n). After 1-2 days of fertilization, the zygote will develop into a larva which is segmented, have mouth hooks, and actively feed. After the larval stage comes the pupa stage in which the body is enclosed in a puparium (outer hard shell) and is inactive and immature. After the pupa states the adult comes out from the puparium by breaking it.

Q. 10. Match the following

A) Oviparous	1. Tadpole to adult
B) Metamorphosis	2. Birds
C) Embryo	3. Fertilisation outside the body
D) External fertilization	4. Developed Zygote.

Answer :

A) Oviparous	2. Birds
B) Metamorphosis	1. Tadpole to adult
C) Embryo	4. Developed Zygote.
D) External fertilization	3. Fertilisation outside the body

Q. 11. What would happen if all the organisms stop the process of reproduction?

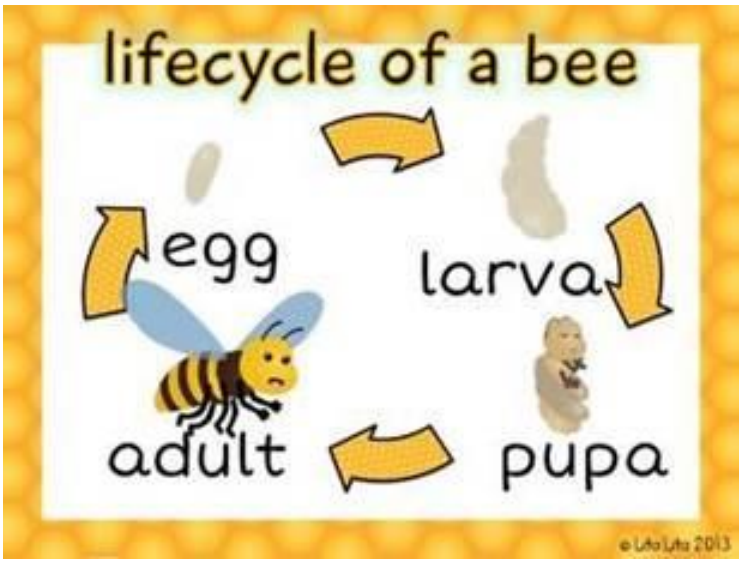
Answer : If all organisms stop the process of reproduction the there will be no organism left and it will lead to extinction.

Q. 12. Kavitha found a tadpole in a pond. She collected it carefully and put it in an aquarium supposing it as a fish. After some days what did she find and why?

Answer : The tadpole is the intermediate stage in the life cycle of a frog. So the tadpole that Kavitha has collected will develop into an adult frog.

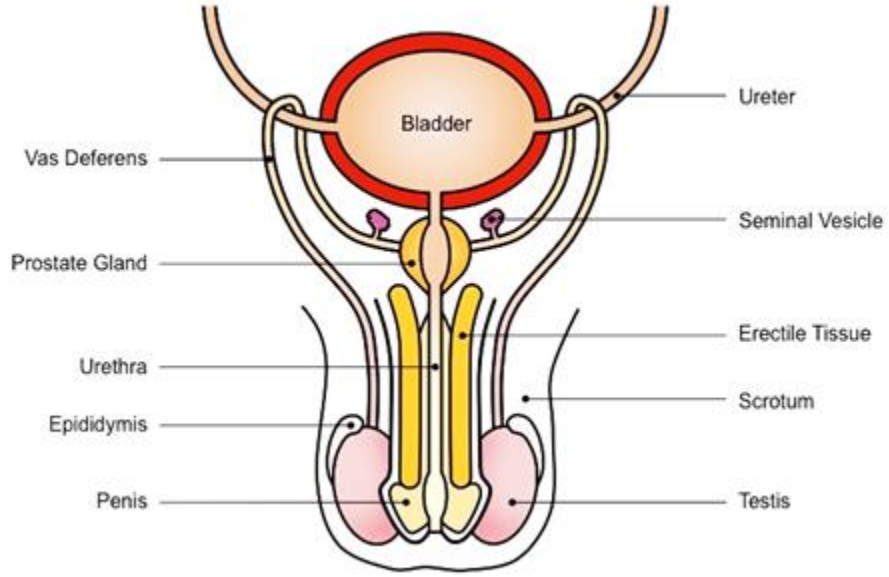
Q. 13. Collect information from your library or from other sources like internet and discuss the life cycle of Honeybees in the symposium at your school.

Answer :

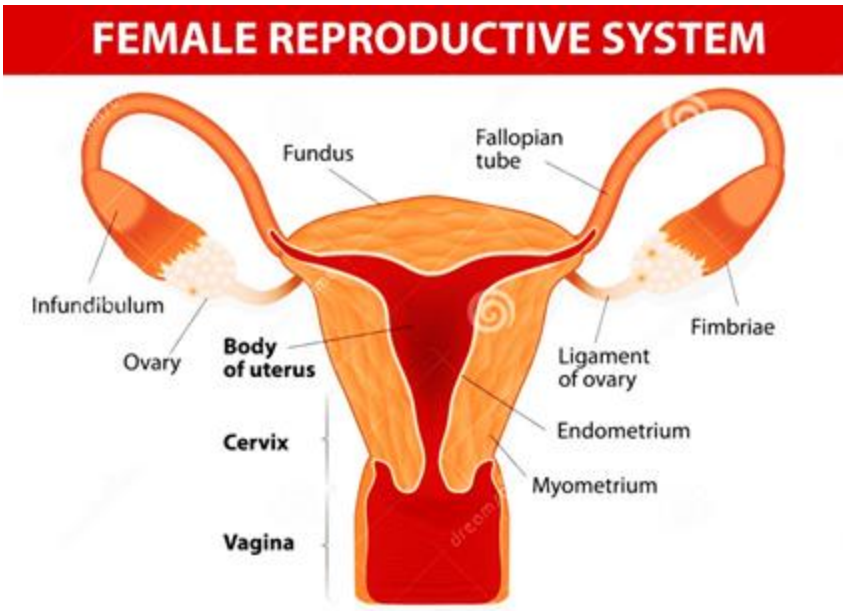


Q. 14. Sketch the diagrams of male and female reproductory systems?

Answer :

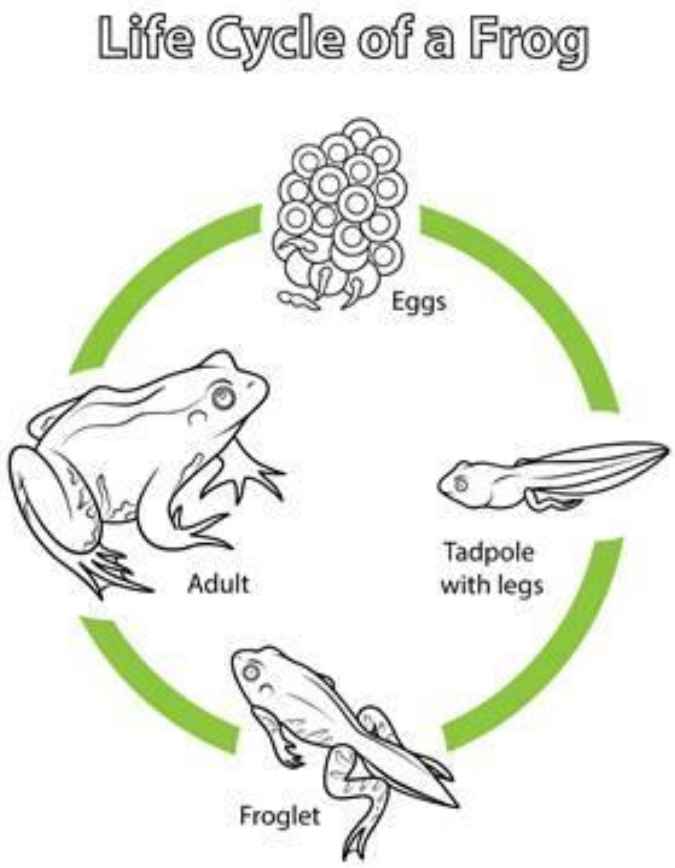


MALE REPRODUCTIVE SYSTEM



Q. 15. Draw a labelled diagram of the life history of frog and identify forms are herbivores

Answer :



Adult frogs are carnivores whereas tadpole are herbivores.

Q. 16. How would you appreciate Ritwik's work when he kept back the pigeon squab in the ventilator? If you were in Ritwik's place what would you do?

Answer : Before keeping pigeon squab one must know everything about them live the conditions in which they grow, feeding habits, breeding habits and should take a proper check on the environment.

By the action of Ritwik, we can say that he has an interest in birds and like to keep them.

I would have done the same what ritwik has done.