

QB365 Question Bank Software Study Materials

Structural Organisation of Animals Important 2 Marks Questions With Answers (Book Back and Creative)

10th Standard

Science

Total Marks : 40

2 Marks

20 x 2 = 40

1) Give the common name of the *Hirudinaria granulosa*

Answer : The Indian cattle leech.

2) How does leech respire?

Answer : Respiration takes place through skin.

3) How many pairs of testes are present in leech?

Answer : There are eleven pairs of testes in leech.

4) How is diastema formed in rabbit?

Answer : Diastema is a gap between incisors and premolar formed due to absence of canine.

5) Which organ acts as suction pump in leech?

Answer : Blood is sucked by muscular pharynx, which act as a suction pump.

6) How does leech suck blood from the host?

Answer : The leech makes a triradiate or 'Y' shaped incision in the skin of the host by the jaws protruded through the mouth and sucks the blood by muscular pharynx.

7) List out the parasitic adaptations in leech.

Answer : Leech is a parasite and sucks the blood of vertebrates and show adaptations.

(i) Suckers are present in the anterior and posterior ends of the body, by which the animal attaches itself to the body of the host.

(ii) The three jaws inside the mouth causes a triradiate or Y shaped wound in the skin of the host.

(iii) Saliva contains a protein called hirudin which prevents the blood clotting. Thus continuous supply of blood is maintained.

(iv) Blood is stored in the crop. It gives nourishment to the leech for several months. Hence, there is no digestive juices and enzyme.

8) Why is the teeth of rabbit called heterodont?

Answer : There are different types of teeth in rabbit. Hence, called as heterodont denition.

9) Where are the suckers present in the leech and what are their functions?

Answer : Leech has two suckers.

(i) The anterior sucker or oral sucker is located in the anterior end of a leech.

(ii) It is ventral in position.

(iii) The posterior sucker is formed by the fusion of the last seven segments.

(iv) The anterior sucker helps in feeding, while both the suckers help in attachment and locomotion.

10) How is the body of leech divided?

Answer : The body of leech is divided in to six regions.

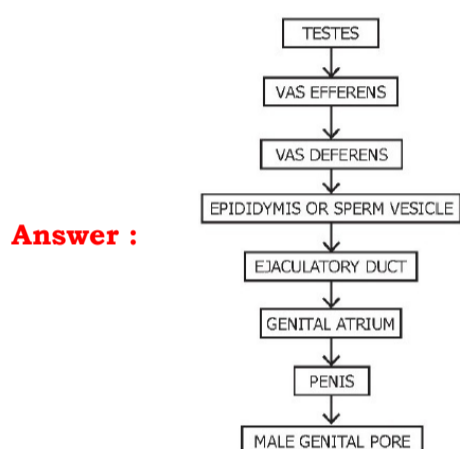
S.No.	Region	Segments
i	Cephalic region	1 th to 5 th

ii	Pre-clitellar region	6 th , 7 th and 8 th
iii	Clitellar region	9 th , 10 th and 11 th
iv	Middle region	12 nd to 22 nd
v	Caudal region	23 rd to 26 th
vi	Posterior sucker	27 th to 33 rd

11) Write a note on the feeding habit & digestion in leech.

- Answer :** (i) The leech is sanguivorous in habit, sucking the blood of cattle and other domestic animals.
(ii) During feeding the leech attaches itself to its victim strongly by the posterior sucker. The leech makes a triradiate or Y shaped incision in the skin of the host by the jaws protruded through the mouth.
(iii) The blood is sucked by muscular pharynx. The salivary secretion is poured.
(iv) The ingested blood is stored in crop chambers and its diverticulum.
(v) The blood passes from crop into stomach.
(vi) Digestion takes place in stomach by the action of proteolytic enzyme.
(vii) The digested blood is then absorbed slowly by the intestine.
(viii) Undigested food is stored in rectum and egested through anus.
(ix) Leeches prevent blood clotting by secreting a protein called hirudin. They also inject an anaesthetic substance that prevents the host from feeling their bite.

12) Write the path of sperm from testes to male genital pore of leech.



13) Name the three accessory glands of male reproductive system of rabbit.

- Answer :** The three accessory glands of male reproductive system of rabbit are,
(i) Prostate gland.
(ii) Cowper's gland and
(iii) Perineal gland.

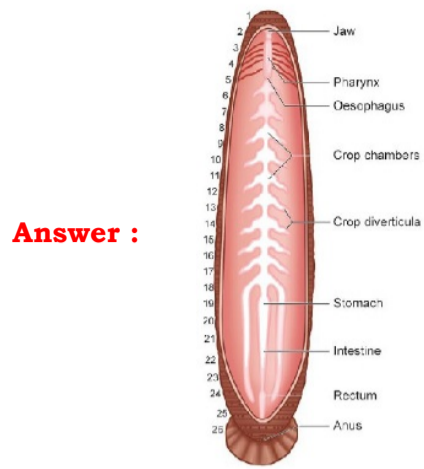
14) Write about the habitat of leech.

Answer : Leech lives in freshwater ponds, lakes, swamps and slow streams. They are ectoparasitic and feed on the blood of fishes, frogs, cattle and human. It is sanguivorous (blood sucking) in nature.

15) Write about the development of young leech.

- Answer :** (i) Internal fertilization takes place. This is followed by cocoon formation. Cocoon is also known as egg case which is formed around the 9th, 10th and 11th segments.
(ii) Development is direct and proceeds in cocoon which contain one to 24 embryos.
(iii) Young leech resembling the adult emerges.

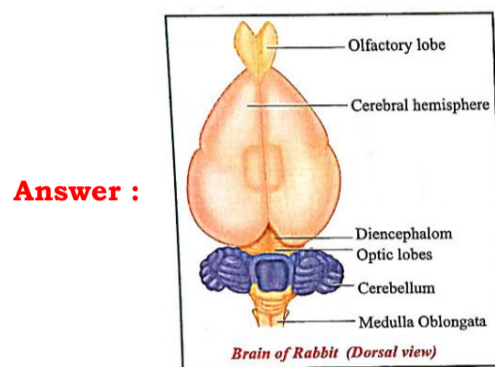
16) Digestive system of Leech.



17) What are structures derived from the outer covering skin of Rabbit?

Answer : Hairs, claws, nails, sweat glands, sebaceous glands and mammary glands are the structures derived from outer covering skin of Rabbit.

18) Draw the dorsal view of brain of rabbit & label the parts.



19) Write the dental formula of rabbit.

Answer : Dental formula is $\left(1\frac{2}{1}, C\frac{0}{0}, PM\frac{3}{2}, H\frac{3}{3} \right)$ in rabbit which is written as $\frac{2033}{1023}$

20) What does CNS stand for?

Answer : CNS stand for Central Nervous System.