

Rabindra Mahabiyalaya

Department of Zoology

Champadanga Hooghly

Sem -II (Honours)

Paper -CC-3

Registration Number	Name	Assignment topic
202201049498	SAYAN GHOSH	Describe with suitable chart diagram of Enterocoel theory of coelom
202201049514	TANISHA KHATUN	Describe with suitable chart diagram of Primary and Secondary coelom
202201049486	RAJENDRA PODDAR	Describe with suitable chart diagram of Pseudocoelom
202201049503	SNEHA MONDAL	Describe with suitable chart diagram of Schizocoelom
202201049476	NIRJITA PAL	Describe with suitable chart diagram of Gonocoel theory of coelom
202201049443	AMITA SANA	Describe with suitable chart diagram of Enterocoelom
202201049463	ESHIKA NAJMIN	Describe with suitable chart diagram of Acoelomate coelom
202201049468	KUNTAL ROY	Describe with suitable chart diagram of Pseudometamerism
201901056800	AMISHA MONDAL	Describe with suitable chart diagram of Homonomous metamerism and Heteronomous metamerism
202201049486	RAHUL BERA	Describe with suitable chart diagram of External and Internal metamerism
202201049480	PIYANA GHOSH	Describe with suitable chart diagram of Distinguish between Pseudometamerism and metamerism
202201049491	ROUNAK SAU	Describe with suitable chart diagram of Cyclomerism theory of metamerism
202201049473	MONIHAR KHATUN	Describe with suitable chart diagram of Distinguish between Coelom and Pseudocoelom

Instruction

1. All students must submit chart
2. Chart containing answer of above questions.
3. All students must write their roll and registration number at the back side of the chart.
4. Every student can use any colour or photo cutting for preparing chart but picture must be colour and writing by using sketch pen or any pen in blue or black colour.

Sample

DESCRIBE WITH SUITABLE CHART DIAGRAM ABOUT
THE EVIDENCE AGAINST LAMARCKISM
[EVIDENCE AGAINST INHERITANCE OF ACQUIRED CHARACTER]

LAMARCKISM
Lamarckism is a theory of evolution based on the principle that physical changes in organisms during their lifetime (such as greater development of an organ or a limb through increased use) could be transmitted to their offspring. Lamarck explained the theory with the example of the giraffe. He said that the ancestors of the giraffe had short necks and used to eat leaves from trees. As they lived in areas where trees with long necks were scarce, they had to stretch their necks and eat leaves from the tall trees. This neck stretching continued over generations and the necks of the giraffes became longer.

POSTULATES OF LAMARCKISM
Lamarckism is based on three factors or postulates:
(1) New needs
(2) Acquisition of new characters:
 (a) Use and disuse
 (b) Inheritance of environment
(3) Inheritance of acquired characters:
The characters acquired by an organism during its lifetime are transmitted to the next generation. In every generation, new acquired changes take place depending on changing needs. As a result, over a number of generations, the species gets modified and it survives.

The Evidence against Lamarckism

(A) **Weismann's experiment** : Weismann conducted the experiment of removing the tails of 40 white mice repeatedly over 9 generations and reported that no mice were born in consequence without a full tail over such a shorter time.

(B) **Pavlov's experiment** : A Russian physiologist, Ivan Pavlov, found that dogs learned to salivate on hearing a bell. He reported that this training is not inherited and (was) necessary in each generation.

Objections of Lamarckism
(1) Inheritance of acquired characters is not possible. (2) Inheritance of environment is not possible. (3) Inheritance of acquired characters is not possible. (4) Inheritance of environment is not possible. (5) Inheritance of acquired characters is not possible. (6) Inheritance of environment is not possible. (7) Inheritance of acquired characters is not possible. (8) Inheritance of environment is not possible. (9) Inheritance of acquired characters is not possible. (10) Inheritance of environment is not possible.

Fig: Weismann's experiment

Examiner

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