

**Model Question Paper**  
**Zoology-Theories of Evolution-Part I**

12th Standard

**Biology**

Reg.No. : 

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I. Answer all the questions.

II. Use blue pen only.

Time : 01:00:00 Hrs

Total Marks : 55

5 x 1 = 5

**Part-A**

- 1) The book 'Philosophie Zoologique' was published by \_\_\_\_\_  
(a) Charles Darwin (b) August Weismann (c) Mc Dougall (d) Jean Baptiste de Lamarck
- 2) The German scientist who segregated germplasm from somatoplasm for the first time was \_\_\_\_\_  
(a) Lamarck (b) Malthus (c) Weismann (d) Hugo de vries
- 3) Mc Dougall supported neo-Lamarckism and proved the concept of -----  
(a) Direct action of environment on organism (b) Learning is an acquired character (c) Speed of learning increased from generation to generation (d) All the above
- 4) Through which of the following concepts did Darwin explain his theory of evolution?  
(a) arrival of the fittest (b) survival of the fittest (c) The differentiation of somatoplasm and germplasm (d) genetic recombinations
- 5) The book "Process of Organic Evolution" to support modern synthetic theory of evolution was written by \_\_\_\_\_  
(a) Dobzhansky (b) G.L. Stebbins (c) Hardy-Weinberg (d) Hugo de Vries

**Part-B**

5 x 3 = 15

- 6) State the theory of Lamarck.
- 7) Define the law of use and disuse.
- 8) Quote the facts of neo-Lamarckism.
- 9) Define the germ plasm theory.
- 10) State the view of McDougall.

**Part-C**

3 x 5 = 15

- 11) Write short notes on neo-Lamarckism.
- 12) Describe the modern concept of Natural selection. (or) What are the three types of selection processes in Natural Selection? Explain.
- 13) Write down the mechanism that prevents interspecific crosses. (or) Explain pre-mating isolation.

**Part-D**

2X10=20

- 14) a) Briefly describe Sewall Wright effect.  
b) Give an account of different type of species.(or) Explain speciation.
- 15) a) What are the conditions under which Hardy-Weinberg law operates?  
b) List out the objections made to Daewinism and write any two supporters of Neo-Darwinians name. Supporters of Neo-Darwinism: T.H Huxley, Asa Gray and E.Haeckel.

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