

**SUBJECT CODE: ZL/MO/EV64**

**B. Sc. DEGREE EXAMINATION, APRIL 2010**  
**BRANCH VI.A. -ADVANCED ZOOLOGY & BIOTECHNOLOGY**  
**SIXTH SEMESTER**

**COURSE : MAJOR – OPTIONAL**  
**PAPER : EVOLUTION**

**TIME : 3 HOURS** **MAX. MARKS: 100**

**SECTION – A**

**ANSWER ALL QUESTIONS: (10 X 3 = 30)**

**1. Fill in the blanks**

- a) The place of origin of horse is \_\_\_\_\_.
- b) Study of fossils is called \_\_\_\_\_.
- c) \_\_\_\_\_ is a connecting link between Annelids and Arthropods.

**2. Match the following**

- | <b>A</b>                | <b>B</b>            |
|-------------------------|---------------------|
| i) Isolation theory     | a) Living fossil    |
| ii) Oceanic island      | d) Neo Darwinism    |
| iii) Parallel evolution | c) F. Redi          |
| iv) Industrial melanism | d) Galapagos        |
| vi) Biogenesis          | f) Horse & Antelope |
| vi) Limulus             | f) Wagner           |

**3. Choose the correct answer**

- i) The concept of sibling species was introduced by  
(a) Mayr (b) Dobzhansky (c) Waller
- ii) Gene mutation is otherwise called  
(a) Speciation (b) Polymorphism (c) Point mutation
- iii) Adaptive radiation is responsible for  
(a) Microevolution (b) Macroevolution (c) Allometry

**4. State whether the following are True or False**

- a) The theory of biogenesis was proposed by Redi.
- b) Darwin traveled by H.M.S. Regal to the Galapagos.
- c) Cromagnon man lived in Europe.

- 5. Define Continental drift.
- 6. Define Sewall-Wright effect.
- 7. Define theory of orthogenesis.
- 8. What is atavism? Give an example.
- 9. What is back mutation?
- 10. Define Hardy – Weinberg law.

**SECTION – B**

**ANSWER ANY FIVE QUESTIONS:**

**(5 X 6 = 30)**

11. Write a short note on any two evidences for evolution.
12. Give an account of horses during Pliocene.
13. Describe geographic isolation.
14. Explain the use and disuse theory of Lamarck with examples.
15. Explain mutation theory of Hugo de Vries.
16. Give an account on barriers and methods of dispersal of animals.
17. Write about allopatric speciation.

**SECTION – C**

**ANSWER ANY TWO QUESTIONS:**

**( 2 X 20 = 40)**

18. Give an account on the various techniques adopted in the dating of fossils.
19. Describe in detail the evolution of man as seen in fossil records.
20. Write an essay on mimicry and its types.
21. Explain adaptive radiation in Darwin's finches.

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