



12th Science : Biology
Origin and Evolution of Life,

DATE:

TIME: 1 hour

MARKS: 25

SEAT NO:

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Note:-

1. All Questions are compulsory.
2. Numbers on the right indicate full marks.

Section A

Q.1 Select and write the correct answer.

(4)

1. Which of the following is likely to be absent from the earth in molecular form?
A) Nitrogen B) Hydrogen
C) Carbon D) Oxygen
2. Vestigial organs present in an adult individual are examples of basis of evidence of evolution.
A) morphological B) paleontological
C) embryological D) anatomical
3. Who proposed that the first form of life could have come from per-existing nonliving organic molecules?
A) Alfred Wallace B) Oparin and Haldane
C) Charles Darwin D) Louis Pasteur
4. Gene frequency in a population remain constant due to _____.
A) Mutation B) Migration
C) Random mating D) Non- random mating

Q.2 Answer the following.

(3)

1. Define the term: Organic evolution
2. How gene mutations change the gene frequency?
3. Define the term: Gene mutation

Section B
Attempt any Four

- Q.3 According to Darwin Differentiate variation & mutations. **(2)**
- Q.4 Write the most significant evolutionary changes that have taken place leaving signs behind **(2)** them.
- Q.5 Which discovery led to the RNA world hypothesis? **(2)**
- Q.6 Where was first fossil of Archaeopteryx found? **(2)**
- Q.7 What are gene recombination? Why do they occur? **(2)**

Q.8 Complete the chart. (2)

Era	Dominating group of animal
1. Cenozoic	a. _____
2. _____	b. Reptiles
3. Palaeozoic	c. _____
4. _____	d. Invertebrates

Section C
Attempt any Two

Q.9 Write a short note on Homo habilis. (3)

Q.10 Write a short note on Louis Pasteur Experiment. (3)

Q.11 Distinguish between Homologous organs and Analogous organs. (3)

Section D
Attempt any One

Q.12 Give paleontological evidences for human evolution. (4)

Q.13 Can you trace down the biological and physical events for how the living forms have been established on Earth. (4)