



Unit Test

Grade 09

SCIENCE

Unit 09

The evolutionary process

Part I

❖ **Answer all the questions.**

01. The origin of the earth took place about,

- | | |
|----------------------------|----------------------------|
| (1). 3.5 billion years ago | (3). 3.5 million years ago |
| (2). 4.5 billion years ago | (4). 4.5 million years ago |

02. Cosmozoic theory explain that,

- (1). all organisms on the earth were created by a super natural power
- (2). life was originated from nonliving things
- (3). the living materials might have got established on earth from a fallen meteor with living organisms
- (4). first living organism was created due to the biochemical reaction happen in the ocean

03. Theory that was introduced by Charles Darwin about evolution.

- | | |
|--------------------------------------|------------------------------------|
| (1). Theory of biochemical evolution | (3). Spontaneous generation theory |
| (2). Cosmozoic theory | (4). Natural selection theory |

04. Not a feature of the first organism of the world,

- | | | | |
|------------------|----------------|--------------------|------------------|
| (1). Unicellular | (2). Anaerobic | (3). Heterotrophic | (4). Autotrophic |
|------------------|----------------|--------------------|------------------|

05. Which gas was not contained in the first atmosphere of the earth?

- | | |
|----------------------|------------------------|
| (1). Carbon dioxide | (3). Methane |
| (2). Carbon monoxide | (4). Hydrogen sulphide |

06. Not a living fossil

- | | | | |
|-----------------|----------------|--------------|----------------|
| (1). Coelacanth | (2). Cockroach | (3). Lingula | (4). Sea horse |
|-----------------|----------------|--------------|----------------|

07. An example for the living plant fossil

- | | |
|-------------------|---------------------------|
| (1). Coconut tree | (3). Tree fern (Ginihota) |
| (2). Jak tree | (4). Non of the above |

08. An animal with the complete evolutionary history with enough fossil records.

- (1). Mammoth (2). Horse (3). Dinosaur (4). Coelacanth

09. Select the false statement.

- (1). Fish are considered as the first type of vertebrates created of the earth.
 (2). Amphibians can be regarded as the first vertebrates that entered in to terrestrial environment.
 (3). The reptiles evolved from amphibians.
 (4). Reptiles are not completely adapted to the terrestrial life than amphibians.

10. Consider the following statements

- a - Plant world was created by the photosynthetic algae in the ocean.
 b - First evolutionary less developed plants were created.
 c - Then flowering plants and finally non flowering plants originated.

Correct statement/statements is/are

- (1). a and b (2). b and c (3). a and c (4). a, b and c all

Part II

01. There are so many beliefs about the origin of the earth.

- (i). What is the first scientific explanation of the origin of the solar system?
 (ii). Name the modern theory about the origin of the earth.
 (iii). Mention 03 gases in the early atmosphere.
 (iv). State 04 theories about origin of life on the earth.
 (v). What is known as evolution?
 (vi). State 03 evidences which are considered when drawing conclusions about evolution.
 (vii). List down 03 things which can be considered as a fossil.
 (viii). Mention 05 locations we can found fossils.
 (ix). Give 05 examples for living fossils.
 (x). What is known as speciation?
 (xi). Mention 01 advantage of speciation.

02. Write down short answers for the following questions about biochemical evolution.

- (i). Explain how ingredients that make life were created.
 (ii). How energy required for above process was supplied?
 (iii). State the method how above materials are collected with ocean water.
 (iv). What is known as primordial soup?
 (v). Mention 02 characteristics of the first organism on the earth.
 (vi). Draw the flow chart to show evolution of vertebrates

(vii). Draw the flow chart to show evolution of the plant world.

(viii). How gaseous oxygen was formed in the initial earth?

03. Fill in the blanks by using following words.

(Oxygen gas, Big bang theory, living fossils, multicellular, extinct, algae)

- (i). Some organisms survive even today retaining their physical properties unchanged through million years and these non-evolved organisms are called
- (ii). The preserved bodies of animals such as mammoth are found with in ice.
- (iii). Due to many changes in the bodies of unicellular organisms organisms were created.
- (iv). Plant world is created due to the various changes of
- (v). The absence of in the early atmosphere is a significant fact.
- (vi). can be considered as the modern theory about the origin of the earth.



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