



ST. LAWRENCE HIGH SCHOOL



A JESUIT CHRISTIAN MINORITY INSTITUTION

WORK SHEET – 24

Class: XII

Sub: Biological Science

Date: 01.07.2020

Topic: Chapter 7 (Part II) Origin of Life and Miller – Urey's experiment

F.M. : 15

Choose the correct option:

(1x15=15)

1. The concept of abiotic origin of biomolecules of Oparin and Haldane was supported by _____ experiment.
a) Needham b) Louis Pasteur c) Miller and Urey d) None of these
2. The primitive atmosphere was simulated in Miller Urey's experiment by providing :-
a) Effect of lightning b) Gases containing CH_4 , NH_3 , H_2 c) Water in vapour state d) All of these
3. The colloidal aggregates of biomolecules are called :-
a) Coacervates b) Protocell c) Organic molecules d) All of these
4. The first cell like structure with a limiting membrane was called :-
a) Coacervates b) Microsphere c) Protocell d) All of these
5. The limiting membrane of the first prebiotic structure chemically consisted :-
a) Phospholipid b) Lecithin c) Cephalin d) Both (b) and (c)
6. The first autocatalytic systems appeared in :-
a) Proto-viruses b) Proto cells c) Coacervates d) Microspheres
7. The first sign of self perpetuating life was displayed by :-
a) Proteins b) Nucleoproteins c) Lecithin d) Cephalin
8. The first organisms originated in the ocean, about 3.7 billion years and they were :-
a) Heterotrophic b) Anaerobic c) Virus-like nucleoproteins d) Organisms with all above characteristics
9. The anaerobic heterotrophs acquired enzymes and it laid the formation of :-
a) Parasites b) Photoautotrophs c) Chemoautotrophs d) Symbionts
10. The chlorophyll bearing prokaryotes of the primitive ocean can be compared to the present day-
a) Blue green algae b) Deep sea sulphur bacteria c) Green algae d) Diatoms
11. The free oxygen liberated by the chlorophyll bearing prokaryotes formed _____ around the earth.
a) Ozone layer b) Ionosphere c) Exosphere d) All of these
12. The prokaryotes developed into eukaryotic cells by the process of :-
a) Symbiosis b) Mutualism c) Endosymbiosis d) None of these
13. In the laboratory apparatus, Miller and Urey synthesized :-
a) Proteins b) DNA c) Amino acids d) Protobiont

14. The first autotrophs probably were _____ and produced _____.
a) Photosynthetic, Oxygen b) Photosynthetic, No oxygen c) Eukaryotic, oxygen d) Eukaryotic, No oxygen
15. Which of the following would have been most likely to develop only after the formation of a true cell ?
a) Autotroph b) Heterotroph c) Microsphere d) Proteinoid

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