ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

WORK SHEET – 12 (SOLUTIONS)

Class: IX Sub: LIFE SCIENCE Date: 20.04.2020

Topic: Origin of life F.M. : 15

Choose the correct option: (1x15=15)

1. Characteristic of living being:
   a) Formed of cells b) ability to grow c) ability to reproduce d) all of these
   Answer : all of these (d)
2. Growth encompasses:
   a) Cell division b) cell elongation c) cell differentiation d) all of these
   Answer : all of these (d)
3. Origin of Earth took place around :
   a) 4.5 billion years ago b) 6 billion years ago c) 3.7 billion years ago d)2 billion years ago
   Answer : 4.5 billion years ago (a)
4. Miller Urey took a mixture of following gases:
   a) Hydrogen,Oxygen,Ammonia b) Hydrogen,Ammonia, carbon monoxide c) Hydrogen,Oxygen,methane d) Hydrogen,oxygen,water vapour
   Answer : Hydrogen, Ammonia , Carbon monoxide(b)
5. Jelly like proteins which was created in Miller Urey represented the:
   a) Hot soup b) hot ocean c) hot dilute soup d) hot sea
   Answer : hot dilute sea (c)
6. Hydrogen used in Miller Urey experiment was to provide :
   a) Oxidising environment b) Reducing environment c) oxidizing and reducing environment d) None of these
   Answer : Reducing environment (b)
7. Aggregates of organic molecules held with hydrophilic force of attraction:
   a) protocell b) microsphere c) coacervates d) proto virus
   Answer: coacervates (c)
8. The first membrane bound structure is called:
   a) Coacervates b) Archea c) protocell d) cyanobacteria
   Answer : Protocell (c)

9. Characteristics of protocell:

a) Gel like cytosol b) cytosol covered by phospholipid membrane c) consists of nucleic acid d) all of the above

Answer: all of the above (d)

10. The first macromolecule RNA which produced the DNA by the process of:
    a) Transcription b) Translation c) Reverse transcription d) splicing

    Answer: Reverse transcription (c)
11. The first life forms were:
    a) Heterotrophic Unicellular prokaryote b) multicellular prokaryote c) unicellular eukaryotic heterotroph d) Both (a) and (b)

    Answer: Heterotrophic unicellular prokaryote (a)
12. The theory of organic evolution of life was proposed by:
    a) Miller and Urey b) Oparin and Haldane c) Hugo de Vries d) Charles Darwin

    Answer: Oparin and Haldane (b)
13. The ability to utilize oxygen through emergence of mitochondria by fusion of two cells is called:
    a) Endosmosis b) Endosymbiosis c) Antibiosis d) Exobiosis

    Answer : Endosymbiosis (b)
14. Formation of first multicellular eukaryotes evolved in three line:
    a) Evolution of plants b) evolution of animals c) evolution of fungi d) All of these

    Answer: All of these (d)
15. Stages of evolution include the following sequence:
    a) Formation of single cell prokaryote followed by multicellular eukaryote and unicellular eukaryote b) Evolution of heterotrophic prokaryote followed by autotrophic prokaryote and unicellular eukaryote c) Formation of eukaryotes directly d) Evolution of heterotrophic prokaryote followed unicellular eukaryotes and autotrophic prokaryotes

    Answer : Evolution of heterotrophic prokaryote followed by autotrophic prokaryote and unicellular eukaryote (b)

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