

Time : 1 hour 15 Minute

STD 11 Science Biology  
Chapter Based Test

Total Marks : 40

SECTION A

\* Choose The Right Answer From The Given Options.[1 Marks Each] [5]

- Phenetic classification is based on:  
(A) Sexual characteristics.  
(B) The ancestral lineage of existing organisms  
(C) Dendograms based on DNA characteristics.  
(D) Observable characteristics of existing organisms.
- According to five-kingdom classification, which of the following does not contain nuclear membrane?  
(A) Protista. (B) Monera. (C) Fungi. (D) Animalia.
- Bacteria lack alternation of generation because there is:  
(A) Neither syngamy nor reduction division.  
(B) Distinct chromosomes are absent.  
(C) No conjugation.  
(D) No exchange of genetic material.
- If all ponds and puddles are destroyed, the organism likely to be destroyed is:  
(A) Leishmania. (B) Trypanosoma.  
(C) Ascaris. (D) Plasmodium.
- Which of the following is true for viruses?  
(A) They invariably contain DNA.  
(B) They multiply only inside the host cell.  
(C) They occur only inside bacteria.  
(D) Their genetic material is RNA.

\* Answer The Following Questions In One Sentence.[1 Marks Each] [6]

- Name the kingdom under which cyanobacteria have been classified.
- Name the group of Monerans, which lacks a cell wall.

OR

Name the smallest known prokaryote.

- In which kingdom of five kingdom classification, nuclear membrane is not present?
- Why two kingdom classification continued to be used for a long time?
- Name the sexual spores produced by the sac fungi. Name the structure in which they are formed.

11. Name
- One free-living and
  - One parasitic amoeboid protozoan.

**SECTION B**

\* **Given Section consists of questions of 2 marks each.** [6]

- Name the aggregation formed by slime moulds during favourable conditions. What happens to it during the following unfavourable conditions?
- Polluted water bodies have usually very high abundance of plants like Nostoc and Oscillatoria. Give reasons.
- Describe the four categories of bacteria, based on the shape of their cells. Represent them diagrammatically too.

**SECTION C**

\* **Given Section consists of questions of 3 marks each.** [9]

- Neurospora- an ascomycetes fungus has been used as a biological tool to understand the mechanism of plant genetics much in the same way as Drosophila has been used to study animal genetics. What makes Neurospora so important as a genetic tool?
- Algae are known to reproduce asexually by variety of spores under different environmental conditions. Name these spores and the conditions under which they are produced.
- Are chemosynthetic bacteria-autotrophic or heterotrophic?

**SECTION D**

\* **Case study based questions** [4]

- Give a brief account of viruses with respect to their structure and nature of genetic material. Also name four common viral diseases.

**SECTION E**

\* **Given Section consists of questions of 5 marks each.** [10]

- What are the benefits of a five kingdom classification over a two kingdom classification?
- Make a list of algae and fungi that have commercial value as source of food, chemicals, medicines and fodder.

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