



## INDIAN SCHOOL SOHAR

18.5.17  
STD XI

UNIT TEST-2017  
BIOLOGY

Marks: 50  
Time: 2Hrs

**General Instructions:-**

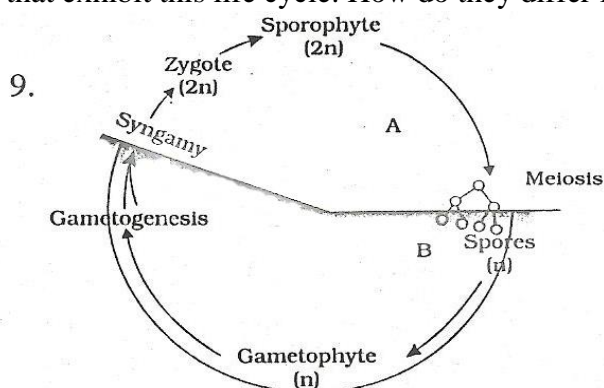
- This question paper consists of five sections **A, B, C, D & E**. Section **A** contains **5** questions of **1** mark each, section **B** is of **5** questions of **2** marks each, section **C** is of **7** questions of **3** marks each and section **D** is **1** questions of **4** marks and section **E** is of **2** questions of **5** marks each.
- All questions are compulsory.
- There is no overall choice. However, an internal choice is provided in one question of **2** marks, one question of **3** marks and all questions of **5** marks weightage. Attempt only **one** of the choices in such questions.
- Questions of section **A** are to be answered in one word or **one sentence** each, section **B** in approximately **20-30** words each, section **C** in **30-50** words each and section **D** in **80-100** words each and section **E** in **80-120** words each.
- Wherever necessary, the diagrams drawn should be neat and properly labeled.

### SECTION-A

1. Herbaria referred to as quick referral systems in taxonomic studies. Justify. (1)
2. Brinjal and potato belong to the same genus *Solanum* but to two different species. What defines them as separate species? (1)
3. What does the given statement '*Contagium vivum fluidum*' mean? (1)
4. List the defining properties exhibited by living organisms. (1)
5. A student accidentally finds a permanent slide without a label. In his effort to identify it, he observes the following features under the microscope – unicellular, eukaryotic, biflagellate. One flagella lying longitudinal and other transverse. Name the organism and the Kingdom to which it belongs. (1)

### SECTION-B

6. Give two point differences between viruses and viroids. (2)
7. (a) Identify the life cycle pattern shown in the figure given below. (2)
- (b) Name the plant groups that exhibit this life cycle. How do they differ from each other?



8. The two kingdom classification was found inadequate. How is the five kingdom classification advantageous over the two kingdom classification? (2)
9. Bacteria are the sole members of Kingdom Monera. How are bacteria classified based on their shape? (2)

### OR

Protozoans are believed to be primitive relatives of animals. Describe briefly the four major group of protozoans.

10. All living organisms can be classified into different taxa. What forms the basis of modern taxonomic studies? (2)

**SECTION-C**

11. What do the following terms signify? (3)  
 (a) Phycobiont and Mycobiont.  
 (b) Polyp and Medusae.  
 (c) Diploblastic and Triploblastic.
12. (a) Enumerate the universally accepted rules followed by biologist while providing scientific names to organisms? (3)  
 (b) The common name of pea is simpler than its scientific name *Pisum sativum*. Why is common name not used instead of complex botanical names in biology?
13. (a) Depict the parts of the female gametophyte in angiosperms with a well labeled diagram. (3)  
 (b) Fertilization in angiosperms said to be unique. Justify.
14. How are bacteria classified based on their mode of nutrition? Give an example each. (3)
15. ICBN has provided a code for classification of plants. Give the hierarchical units of classification Botanists follow while classifying wheat and man. (3)
16. How does *Spirogyra*, *Sargassum* and *Porphyra* differ based on the pigments and stored food? (3)
17. The following are structures associated with the Plant Kingdom. Mention their role in the plant body? (a) Prothallus (b) Gemmae (c) Strobili. (3)

**OR**

State the economic importance of the following:

- (a) Methanogens (b) Mycorrhiza (c) Spirulina.

**SECTION-D**

18. Nutrient related pollution significantly impacts drinking water supplies, aquatic life and recreational water quality by supporting excessive algal growth. Nutrients reach water bodies through agricultural runoff, sewage discharge and detergents. The amount of material being discharged is humongous. Polluted water bodies usually have high abundance of plants like *nostoc*, *anabaena* and *oscillatoria*. Across the planet, they have wrecked local ecosystems. (4)  
 (a) Give a term for the excessive growth of algae in polluted water bodies.  
 (b) What is the impact of this on life forms in the Water bodies?  
 (c) What is the principle underlying the use of cyanobacteria in agricultural fields for crop improvement? How is this beneficial to the environment?

**SECTION-E**

19. (a) Describe briefly, the life cycle of *Funaria* emphasizing the haploid and diploid phases. (5)  
 (b) Why are Bryophytes called amphibians of the plant kingdom?

**OR**

- (a) Make a comparative account of the classes of Kingdom Fungi based on the mode of spore formation and fruiting body.  
 (b) Give two economic importance of fungi.
20. (a) Given below is a table depicting a particular system of classification, fill in the blanks from (a) to (j). Who proposed this system of classification? (5)

Characters	Monera	(a) -----	Fungi	(b) -----	Animalia
(c) -----	(d) -----	Eukaryotic	Eukaryotic	(e)-----	Eukaryotic
(f) -----	(g) -----	Cellular	Multicellular /Loose tissue	Tissue /organ	(h) ----- -
Mode of nutrition	Autotrophic/ Heterotrophic	Autotrophic/ Heterotrophic	(i) -----	Autotrophic	(j) -----

**OR**

Give an outline of the broad classification of Kingdom Animalia based on common fundamental features.

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