

CLASS: XI



INDIAN SCHOOL SOHAR

UNIT TEST (2019 -20)

MAX. MARKS: 50

DATE: 15/05/2019

SUBJECT: BIOLOGY

DURATION: 2HOURS

General Instructions:-

- This question paper consists of four sections **A, B, C & D**. Section **A** contains **5** questions of **1** mark each, section **B** is of **7** questions of **2** marks each, section **C** is of **7** questions of **3** marks each and section **D** is **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 **1** mark, 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 **80-120** words each.
- Wherever necessary, the diagrams drawn should be neat and properly labeled.

SECTION-A

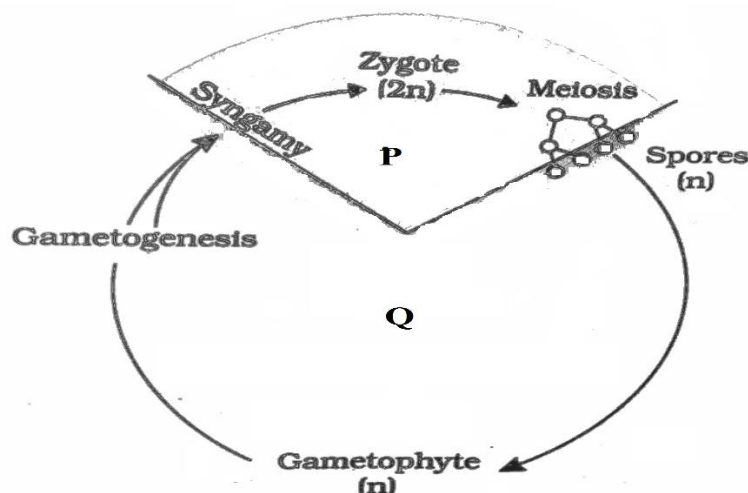
1. What is the principle underlying the use of cyanobacteria in agricultural fields? 1
2. Unlike bryophytes and pteridophytes, in gymnosperms the male and female gametophyte do not have an independent free-living existence. Give reason. 1
3. "All vertebrates are chordates but all chordates are not vertebrates". Justify the statement. 1
4. Herbaria also serves as a quick referral systems in taxonomic studies. Give reason. 1
5. All organisms, have species as the lowest category. Define species. 1

OR

Animals with notochord are called chordates. Define notochord.

SECTION-B

6. Given below is the life cycle exhibited by a plant group.



- a) Identify the type of life cycle and the group of plant that exhibits it.
 - b) Name the phases marked A and B in the given cycle. 2
7. 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, cell walls form two overlapping halves which fit into each other. Name the organism and the Kingdom to which it belongs. Mention the significance of their cell wall deposits. 2

8. How are bacteriophages different from viroids? 2
9. Draw a neat labelled diagram showing the fundamental features that chordates possess. 2
10. The common name of pea is simpler than its scientific name *Pisum sativum*. Enumerate the universally accepted rules followed by biologist while providing scientific names to organisms. 2
11. All living organisms can be classified into different taxa. Name the processes that are basic to taxonomy. 2
12. What are the drawbacks of artificial system of classification over the natural system of classification? (Any two points) 2

OR

The two kingdom classification was developed by Linnaeus'. Citing examples, explain two inadequacies of two kingdom classification. 2

SECTION-C

13. The protozoans are believed to be primitive relatives of animals. How are they classified based on their habitat and appendages? Give an example each. 3
14. Reproduction in fungi can take place by vegetative, asexual and sexual means. Explain the steps involved in the sexual cycle of fungi. 3
15. How does *Spirogyra*, *Laminaria* and *Gelidium* differ based on the pigments and stored food? 3
16. State the economic importance of the following:
 a) Methanogens b) *Sphagnum* c) *Spirulina*.

OR

Identify the distinctive feature in the following organisms that assigns it to its respective phylum. How does it help the organism?

- a) *Pheretima* b) *Locusta* c) *Asterias*. 3
17. Distinguish between the following:
 a) Nephridia and malpighian tubules.
 b) Polyp and Medusa.
 c) Diploblastic and Triploblastic. 3
18. Bryophytes includes various mosses and liverworts. Explain how the haploid and diploid phases alternate in *Funaria*. 3
19. Archaeobacteria have a different cell wall structure. How are they classified based on the habitat in which they live? 3

SECTION-D

20. a) In angiosperms, the seeds are enclosed in fruits. Diagrammatically represent, how the gametophytic and sporophytic phase alternate with each other in an angiosperm.
 b) Fertilisation in angiosperms is said to be unique. Justify.

OR

- a) Make a comparative account of the classes of Kingdom Fungi based on the mode of spore formation and fruiting body.
 b) Some fungi are symbiotic. Substantiate this with two examples. 5
21. Give a comparative account of the different characteristics of the kingdom Monera and Protista proposed by R.H Whittaker.

OR

Give a broad outline of the classification of Kingdom Animalia based on common fundamental features. 5
