



MODEL QUESTION PAPER: 2021-2022

FIRST TERM EXAMINATION

BIOLOGY

Class: XI

Max. Marks: 40
Duration: 1.5 HRS

General Instructions:

- (i) *The question paper comprises four sections A, B, C and D. There are 16 questions in the question paper. All questions are compulsory.*
- (ii) *Section–A - question no. 1 to 7 - all questions and parts thereof are of one mark each. These questions very short answer type questions and assertion - reason type questions. Answers to these should be given in one word or one sentence.*
- (iii) *Section–B - question no. 8 to 10 are short answer type questions, carrying 2 marks each. Answers to these questions should in the range of 30 to 50 words.*
- (iv) *Section–C - question no. 11 to 13 are short answer type questions, carrying 3 marks each. Answers to these questions should in the range of 50 to 80 words.*
- (v) *Section–D – question no. 14 to 16 are long answer type questions carrying 5 marks each. Answer to these questions should be in the range of 80 to 120 words.*
- (vi) *There is no overall choice. However, internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.*
- (vii) *Wherever necessary, neat and properly labeled diagrams should be drawn.*

SECTION A

1. What is meant by a symbiont? (1)
2. What is the ecological importance of lichens? (1)
3. Mention two features of mycoplasma. (1)

For question numbers **4, 5** and **6**, two statements are given- one labeled **Assertion (A)** and the other, **Reason (R)**. Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below:

- a) Both A and R are true, and R is correct explanation of the assertion.
- b) Both A and R are true, but R is not the correct explanation of the assertion.
- c) A is true, but R is false.
- d) A is false, but R is true.

4. **Assertion:** Dinoflagellates are harmful to marine animals. (1)

Reason: They release toxins.

5. **Assertion:** Deuteromycetes are known as imperfect fungi. (1)

Reason: They are decomposers.

6. **Assertion:** Plants show alternation of generation.

Reason: This is to keep the chromosome number constant (1)

Q. No 7 contain five sub-parts each. You are expected to answer any four sub-parts in this question.

7. Read the following and answer any **four** questions from 7 (i) to 7 (v) (1x4=4)

The predominant stage in the life cycle of a moss is the gametophyte which consists of two stages. The first stage is the protonema stage which develops directly from a spore. It is creeping, green, branched filamentous stage. The second stage is a leafy stage, which is upright bearing leaves. It is attached to the soil by rhizoids. This stage bears antheridia and archegonia. After fertilization, the zygote develops into a Sporophyte, consisting of foot, seta, and capsule. The capsule bears spores that are formed after meiosis.

i.) Rhizoids function as....

- A) roots B) leaves C) seeds D) stem

ii.)and..... are the two stages of the gametophyte of moss.

iii.) The dominant stage in the life of moss is

- A) sporophyte B) gametophyte C) protonema D) capsule

iv.) Spores are present in the

v.) The sporophyte has

- A) foot B) seta C) capsule D) all the above

SECTION B

8. What are methanogens and halophiles. What are their special features? (2)
9. Differentiate between chemosynthetic and photosynthetic autotrophs. (2)
10. List out the special features of euglenoids. (2)

OR

Write a short note on the economic importance of diatoms

SECTION C

11. What is double fertilisation? In which group of plants is it seen? (3)
12. Describe the various types of sexual reproduction that takes place in algae. (3)
13. Draw a well labelled diagram to show a male and a female thallus of Marchantia 3

OR

Draw a well labelled diagram to show gametophyte and a sporophyte of moss.

SECTION D

14. a.) Describe in detail haplontic life cycle. (5)
- b.) What is meant by a thallus?

OR

- a.) Describe in detail diplontic life cycle.
- b.) What is meant by a viroid?
15. Discuss the special features of Chlorophyceae and phaeophyceae.
Mention two examples for each. (5)
16. Explain in detail the megasporangium and microsporangium of gymnosperms. (5)
