

2022

1st Semester Examination

BOTANY

Paper : BOT 102

Full Marks : 40

Time : Two Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Paper : BOT 102.1

(Phycology)

1. Answer any *two* of the following : 2×2=4

- (i) How does carrageenan differ from agar?
- (ii) What is the common causes of soil infertility in India?
- (iii) Name some major factors to be looked into for ideal fish feed.
- (iv) What is muroplast? Where is it found?

2. Answer any *two* of the following : 4×2=8

- (i) Write briefly on 'Green water technique'.
- (ii) Illustrate the salient features of Cyanobacteria.

P.T.O.

(iii) Mention different types of soil infertility. How can algae contribute in reclaiming soil fertility? 2+2

(iv) How does Glaucophyta show similarity with Cyanobacteria? Comment on the uniqueness of the group. 2+2

3. Answer any *one* of the following : 8×1=8

(i) Illustrate the different ontogenetical types of thallus formation in Rhodophyta.

(ii) Write a comprehensive note on sources, chemistry and uses of alginic acid. 2+3+3

Paper : BOT 102.2

(Bryology)

1. Answer any *two* of the following : 2×2=4

(i) Who first discovered alternation of generation ? Mention the year.

(ii) Which liverwort taxa have star and lunar shaped gemma cup?

(iii) Is *Sphagnum* a true moss? Justify it.

(iv) What is "m" chromosome and in which liverwort "m" chromosome has been detected?

2. Answer any *two* of the following : 4×2=8

Write differences between —

(i) Photosynthetic and hyaline cells in mosses ;

- (ii) Thalloid and filamentous protonema ;
- (iii) Elaters and pseudoelaters ;
- (iv) Bio and bryomonitoring.

3. Answer any *one* of the following : 8×1=8

- (i) Who first proposed molecular system of classification in bryophytes ? Mention the year. What are the differences between traditional and molecular system of classification? Give a brief outline of molecular system of classification with merits and demerits of each. 2+2+4
 - (ii) Write short notes on : Calobryales with their characteristics features affinities, and systematics position. 3+3+2
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