

PG CBCS
M.Sc. Semester-I Examination, 2020
BOTANY
PAPER: BOT 102
PHYCOLOGY & BRYOLOGY

Full Marks: 40**Time: 2 Hours**

Write the answer for each unit in separate sheet

BOT 102.1
PHYCOLOGY

1. Answer any two questions from the following: **10 x 2 =20**

- I. Write the salient features of pheophyceae. Write the pigments and reserve food materials of xanthophyceae. 6+2+2
- II. What is Carrageenan? Write its structure & uses? Write short notes on pheromone in algae?
- III. What is a green water technique? Write the benefits of green water technique. Name two algae used in it. Name two algae which eat fishes. 3+3+2+2
- IV. What is SCP? Write the production process of SCP. Write its advantage and disadvantage & uses. 2+3+3+2
- V. Discuss the reclamation of soil by algae. Write the salient features of Bacillariophyceae. What is palmella stage? 3+5+2

BOT 102.2
BRYOLOGY

2. Answer any two questions from the following: **10 x 2 = 20**

- I. Write down the affinities and systematic position of *Takakiales* and *Calobryales*. Name two free floating liverworts. 4+4+2
- II. What are indicators? Why Bryophytes are considered as excellent indicators of pollutions? Mention the factors responsible for affecting the degree of damage from any one pollutant. 2+4+4
- III. Define heterochromatin. Who first discovered heterochromatin in Bryophytes? How chromosome numbers in bryophytes have been used in taxonomical studies. 3+1+6

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- IV. What is karyotype? What are the significance of chromosome number in taxonomic implication of bryophytes? What is 'M' chromosome? Give significance of 'M' chromosome. 2+3+2+3
- V. Write the recent system of classification in bryophytes. Who first introduced recent system of classification? Mention the year of introduction. What are the basic differences between traditional and current system of classification. 5+1+1+3
