

Acc No. 8702

MCC/17/M.Sc./Sem.-1/BOT/1

First Semester Examination-2017

M.Sc. BOTANY

Paper Code: BOT-102, Phycology & Bryology

Full Marks : 40

Time: 2 Hours

Write the answer for each unit in separate sheet

Unit -I

Phycology

- 1. Answer any four question of the following** **1×4=4**
- a) What is Mastigoneme and where does it found?
- b) What are the constituents of "eye spot" and where is it found?
- c) Name one parasitic algae and mention its family.
- d) Define "Palmelloid stage" and mention its significance.
- e) Mention one unique feature of "Heterokontophyta".
- f) What is the significance of "Nucleomorph".
- g) What is "agar-agar". Mention its sources.
- 2. Answer any two question of the following** **2×3=6**
- a) Write a note on "alginic acid"
- b) Endo symbiotic theory and its significance.
- c) Importance of algae in Space Research.
- 3. Answer any one of the following** **1×10=10**
- a) Define SCP. Mention the algal source of SCP. Merits and demerits of SCP.
Two important use of SCP. **3+3+2+2**
- b) Write the salient feature of Prochlorophyta. Contrast the division with Cyanophyta. Explain with reason the enigamatic phylogenetic position of Prochlorophyta. **4+2+4**

(Turn Over)



Unit – II

Bryology

- 1. Answer any four question of the following:** **1×4=4**
- a) Who is the father of Indian Bryology?
 - b) Name two liverworts which have no epidermal air-pores.
 - c) Who first discovered 'sex-chromosome' in liverworts and mention its name.
 - d) Name a bryophyte which has lowest chromosome number.
 - e) What are hydroids and leptoids. Mention its function.
 - f) Name two bryophytes (one from liverworts and another from mosses) from South West-Bengal.
 - g) Why peat moss is not a true moss?
- 2. Write short notes on any two of the following** **2×3=6**
- a) Order Takakiales
 - b) Significance of "*Niadita lanceolata*"
 - c) Biotechnology of Bryophytes.
- 3. Answer any one of the following question** **1×10=10**
- a) Write down the affinities and systematic position of Calobryales and Sphagnales. 5+5
 - b) Write the namè of four chemical compounds found in bryophytes. Discuss their taxonomic significance. Name a bryophytes has lignin substances and who discovered it? 2+5+3

