

U.G. 3rd Semester Examination - 2024**BOTANY****[MAJOR]****Course Code : BOT-MJ-T-03****(Phycology and Lichen)****[NEP-2020]**

Full Marks : 40

Time : $2\frac{1}{2}$ Hours*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*

1. Answer any five questions : $2 \times 5 = 10$
- i) What is SCP? Give an example.
 - ii) How does Lichen take role as an indicator?
 - iii) What is algal bloom? How is it detrimental to environment?
 - iv) Write about the reserve food materials found in Phaeophyceae.
 - v) Write the scientific name of a Lichen and refer its habitat.
 - vi) What are the pigments found in Cyanophycean members?

[Turn over]

vii) Name two sex types in *Oedogonium* with sketches.

viii) What do you mean by alternation of generation?

2. Answer any two questions: $5 \times 2 = 10$

i) What is heterocyst? Write its structure and function. $1+2+2$

ii) What is Lichen? Write the ecological role of Lichen. $1+4$

iii) What is algal toxin? Write the economic importance of Cyanophyceae. $1+4$

iv) Write in brief the sexual reproduction of *Chlamydomonas* with sketches. $3+2$

3. Answer any two questions : $10 \times 2 = 20$

i) Describe about various algal products and their uses. 10

ii) Write in details the morphological structure of pinnate *Diatom* with sketches. Write the economic importance of *Diatom*. $5+2+3$

iii) What is triphasic life cycle? Diagrammatically represent the life cycle of *polysiphonia*. $2+8$

iv) Describe various types of Lichen with sketches and examples. $6+4$
