

AU-228

M.Sc. Semester—I (C.B.C.S. Scheme) Examination
BOTANY
(Biology and Diversity of Algae and Bryophytes)
Paper—III

Time : Three Hours]

[Maximum Marks : 80

- Note :—** (1) All questions are compulsory.
(2) Illustrate your answers precisely with suitable diagrams and with suitable examples.
(3) All questions carry equal marks.

1. Write on :

- | | |
|---|---|
| (a) Pigments in Algae | 5 |
| (b) Alternation of generation in Algae | 6 |
| (c) G.M. Smith classification of Algae. | 5 |

OR

- | | |
|--|----|
| (d) Sexual reproduction in Algae | 6 |
| (e) Ultrastructure of cell in Cyanophyta | 5 |
| (f) Reserve food material in Algae. | 5 |
| 2. Write in detail on general account of Volvocales. | 16 |

OR

Give general account on Bacillariophyceae. 16

3. Write on :

- | | |
|------------------------------------|---|
| (g) Range of thallus in Rhodophyta | 6 |
| (h) Algae as biofertilizer | 5 |
| (i) Water blooms. | 5 |

OR

- | | |
|------------------------------------|---|
| (j) Phytoplankton | 5 |
| (k) Algae is Symbiotic Association | 5 |
| (l) Reproduction in Phaeophyta. | 6 |

4. Write an account on economic and ecological importance of Bryophytes. 16

OR

Give a detailed account on fossil bryophytes. 16

5. Write on :

(m) Internal structure of thallus in Marchantiales 6

(n) Sporophyte in Anthocerotales 5

(o) Thallus structure in Jungermanniales. 5

OR

(p) Sporophyte of Andreales 5

(q) Reproduction in Polytrichum 5

(r) Progressive evolution of Gametophytes. 6