

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai — 600 044.

M.Sc. - END SEMESTER EXAMINATIONS APRIL - 2022

SEMESTER - I

16PPBCE1002 - APPLICATION OF ALGAE

Total Duration : 3 Hrs.

Total Marks : 60

Section A

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Describe the structure and functions of heterocyst enlisting the significance of blue green algae.
2. Explain the extraction method and uses of agar-agar.
3. Write an account on the applications genetic engineering in algae with examples.
4. Discuss the techniques involved in the mass cultivation of *Haematococcus*.
5. Role of algae in Nanotechnology – Discuss in detail.
6. Write short notes on (a) *Chlorella* and (b) Carrageenin.
7. National laboratories involved in cultivation of marine algae – Discuss.
8. Write short notes on (a) Phycoremediation and (b) Algae in aquaculture.

Section B

Part A

Answer any **TWO** questions ($2 \times 10 = 20$ Marks)

9. Write a detailed note on the causes and consequences of aquatic pollution.
10. Mass cultivation of *Spirulina* – Discuss in detail.
11. Explain the preparation, composition and uses of liquid fertilizer in detail.
12. Elaborate on the methods of cultivation of macro-algae.

Part B

Compulsory question ($1 \times 10 = 10$ Marks)

13. Write an essay on the uses of algae as food, medicine and agriculture with appropriate examples.
