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 NOVEMBER - 2022 SEMESTER - I 22PPBET1002 - Applications of Algae

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section A

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

1. Ilustrate the nutraceutical applications of Algae.

2. Describe in detail the nutrient compositions of *Spirulina*.

3. Classify the characteristics features of Agar-agar.

4. Describe the structure of carageenen in detail.

5. Discuss the applications of genetic engineering in Algal Biology.

6. Write notes on macroalgae in detail.

7. Explain about the mass culture of haematococcus.

8. Organize a brief note on medicinal importance of algae.

Section B

Part A

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

9. Describe in detail the significance of blue green algae in agriculture.

10. Relate the importance source of algae for extraction of alginic acid.

11. Examine the production of macroalgae by raft, net and rope cultivation .

12. Evaluate the various steps involved in mixotropic and heterotrophic cultivation of algae.

Part B

Compulsory question $(1 \times 10 = 10 \text{ Marks})$

13. Justify the role of algae in aquatic pollution control and nanotechnology.

1