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.PBPBT - END SEMESTER EXAMINATIONS - NOV' 2024 SEMESTER - I 24PPBET1A02 - Applications of Algae

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

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

- 1. Describe the preparation and imposition of seaweed liquid fertilizers and outline their agricultural uses.
- 2. Explain the differences between carrageenan and agar-agar.
- 3. Classify the Macroalgal Cultivation Methods.
- 4. Apply the methods employed for harvesting of *Haematococcus*. Write the factors should be considered when selecting a harvesting method.
- 5. Describe the role of algae in fisheries and medicine. How do they contribute to these sectors? Provide specific examples to illustrate their importance.
- 6. Illustrate the economic importance of algae in various industries, including food, pharmaceuticals, and biofuels.
- 7. Explain the significance of algae as bioindicators for assessing water quality and pollution.
- 8. Discuss the therapeutic applications of *Haematococcus*. How does its composition contribute to its health benefits?

Section C

- I Answer any **TWO** questions $(2 \times 10 = 20 \text{ Marks})$
- 9. Appraise neutraceutical importance of algae.
- 10. Apply biomass conversion into ethanol.
- 11. Examine the applications of genetic engineering in algae.
- 12. Discuss the mass culture of *Spirulina*.

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

13. Determine the role of algae as indicator in accessing water quality and pollution.
