

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.

B.Sc.PBPBT - END SEMESTER EXAMINATIONS - APRIL 2025

SEMESTER - I

**20UPBCT1001 - Phycology**

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

### Section B

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

1. Write notes on different type of life cycle in Algae.
2. Brief notes on Cyanophyceae and its applications.
3. Explain the Asexual and sexual reproduction in Phaeophyceae.
4. Describe the structure and function of heterocyst.
5. Write notes on
  - a) Ultraviolet radiation
  - b) Sterile filtration
6. Write notes on Streaking method and advantages.
7. Briefly describes the Algal biofertilizers and its application.
8. Write notes on Nitrogen fixation and its application.

### Section C

Answer any **THREE** questions ( $3 \times 10 = 30$  Marks)

9. Briefly notes on Rhodophyceae structure, pigmentation, flagellation, preserve food.
10. Brief notes on
  - a) Haplontic life cycle
  - b) Diplontic life cycle
  - c) Triphasic life cycle
11. Briefly describe the fertilization and lifecycle
  - a) Anabaena
  - b) Hormogonium
12. Write notes on the following :
  - a) Pasteurization
  - b) Autoclaving
  - c) Inoculation
  - d) Culture conditions
  - e) Maintenance of culture
13. How to do the Mass cultivation of Chlorella and Spirulina in Industry?  
Explain Briefly.

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