

## **BOTANY**

**B.Sc. I, Year I, Semester I, Paper I**

**Course Code : B040101T**

**Course Title Microbiology and Plant Pathology**

**Unit III - PHYCOLOGY**

**No. of Lectures ( 60 hrs): 7**

- Range of thallus organization in algae
- Pigments
- Reserve food
- Reproduction
- Classification and Life Cycle of -

Nostoc, Chlorella, Volvox, Hydrodictyon, Oedogonium, Chara, Sargassum, Ectocarpus, Polysiphonia

- Economic Importance of Algae- Role of Algae in Soil fertility- Biofertilizer- Nitrogen Fixation- Symbiosis
- Commercial Products of Algae- Biofuel, Agar

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**B.Sc. I, Year I, Botany, Semester I, Paper II**

**Course Code : B040102P**

**Course Title: Techniques in Microbiology and Plant Pathology**

## Unit III - PHYCOLOGY

No. of Lectures ( 60 hrs): 7

### 1. Type study of Algae and Cyanobacteria

- Cyanobacteria- Spirulina, Nostoc
  - Chlorophyceae - Chlorella, Volvox, Oedogonium, Cladophora, and Chara
  - Xanthophyceae - Vaucheria
  - Bacillariophyceae - Pinnularia
  - Phaeophyceae - Sargassum
  - Rhodophyceae - Polysiphonia
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### Recommended Books:

1. Kumar, H.D. (1999). Introductory Phycology. Affiliated East- West Press Pvt. Ltd. Delhi 2nd edition.
2. Annie Ragland, 2012, Algae and Bryophytes, Saras publication, Kanyakumari, india.
3. Chopra, G.L., 1984. A textbook of Algae, rastogi Publications, Meerut, India.
4. Desicachari, T.V., 1959. Cyanophyta, ICAR, New delhi.
5. Fritsch, F.E., 1977. structure and Reproduction of Algae, Cambridge University Press, London.
6. Pandey, B.P., 2001. College Botany, Vol I, S. Chand & Company Pvt. Ltd., New Delhi.
7. Sunder Rajan, S.,2010. College Botany, Vol I, Himalaya Publications, Mumbai.
8. Vashishtha, B.R., Sinha, A.K. and Singh, V.P., 1991. Algae, S. Chand & Company Pvt. Ltd., New Delhi.