



**Avinashilingam Institute for Home Science and Higher Education for Women**  
 (Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)  
 Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B  
 Coimbatore - 641 043, Tamil Nadu, India

**Bachelor's Degree Examination – March 2021**  
**I Semester**

**Class : I UG**  
**Major : Botany**

**Time : 3 Hours**  
**Max. Marks: 100**

**18BBOC02 Algae, Fungi and Lichens**

**Part A**  
**Choose the Correct Answer**

**10 x 1 = 10**

1. Group of red or blue photosynthetic pigments present in algae is known as \_\_\_\_\_  
 a. Hemoglobins      b. Phycobilins      c. Chlorophylls      d. None of the above
2. Cup-shaped chloroplast is present in  
 a. *Chlamydomonas*      b. *Oedogonium*      c. *Oscillatoria*      d. *Volvox*
3. Which group of the following comprises red algae?  
 a. Chlorophyceae      b. Phaeophyceae      c. Rhodophyceae      d. Cyanophyceae
4. The asexual reproductive structure in *Vaucheria* is  
 a. Autospores      b. Gametophyte      c. Sporophyte      d. Akinetes
5. Which one of the following lack chlorophylls and hence cannot perform photosynthesis?  
 a. Algae      b. Fungi      c. Lichens      d. Cyanobacteria
6. The antibiotic penicillin is produced by  
 a. *Penicillium*      b. *Albugo*      c. *Plasmodiphora*      d. *Polysiphonia*
7. The common name of *Puccinia* is  
 a. Red fungi      b. White fungi      c. Rust fungi      d. Black fungi
8. *Polyporus* is known as \_\_\_\_\_, which can grow on various trees.  
 a. Leaf rotters      b. Wood rotters      c. Root rotters      d. Fruit rotters
9. Lichen is a stable symbiotic association between a \_\_\_\_\_ and \_\_\_\_\_.  
 a. Algae, Angiosperms      b. Algae, Gymnosperms  
 c. Angiosperms, Fungi      d. Algae, Fungi
10. The taxonomic group of \_\_\_\_\_ is known as good pollution indicators.  
 a. Lichens      b. Algae      c. Fungi      d. Bryophytes

**Part B**

**5 x 6 = 30**

**Answer ALL questions**

**Each answer should not exceed 400 words or two pages**

- 11.a. Mention the general characteristics of thallophyta.  
(or)
- 11.b. Briefly explain the reproduction in *Oscillatoria*.
- 12.a. Write a brief note on the habit and thallus structure of *Polysiphonia*.  
(or)
- 12.b. Comment on the economic importance of Algae.
- 13.a. Describe the systematic position and cell structure of *Plasmodiophora*.  
(or)
- 13.b. Explain the general characters of Phycomycetes.
- 14.a. Write an account on the differences between Basidiomycetes and Deuteromycetes.  
(or)
- 14.b. Comment on the major economic importance of Fungi.
- 15.a. Compare Homeomerous and Heteromerous lichens.  
(or)
- 15.b. Write an account on Apothecium.

**Part C**

**5 x 12 = 60**

**Answer ALL questions**

**Each answer should not exceed 800 words or fourpages**

- 16.a. Explain in detail the Fritsch's Classification of Algae.  
(or)
- 16.b. Write an essay on reproductive system of Chlorophyceae.
- 17.a. Describe the cell structure and reproduction of *Vaucheria*.  
(or)
- 17.b. Write a critical account on cell structure reproduction and lifecycle in *Ectocarpus*.
- 18.a. Write an essay on classification of Fungi by Alexopoulos.  
(or)
- 18.b. Briefly explain the common features of Ascomycetes. Add a note on *Penicillium*.
- 19.a. Explain the structure and reproduction of polyporus.  
(or)
- 19.b. Discuss the structure and reproduction in *Fusarium*.
- 20.a. Describe in detail about classification and economic importance of lichens.  
(or)
- 20.b. Elaborate the vegetative, asexual and sexual reproduction of lichens.

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