

**PD – 180**  
**(571)M.Sc. MICROBIOLOGY (FIRST SEMESTER)**

**Examination- DEC.-2020**

**Compulsory/Optional**

**Group -**

**Paper- III**

**PHYCOLOGY, MYCOLOGY AND PROTO-ZOOLOGY**

**Time:- Three Hours ]**

**[Maximum Marks:80**

नोट : दोनो खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर आंकित हैं।

Note: Answer From Both the Section as Directed. The Figures in the right-hand margin indicate marks.

**Section – A**

1. Answer briefly on the following questions: **1X10=10**
  - (a) What is Cyanobacteria.
  - (b) Write about Azolla.
  - (c) What is Heterothallism.
  - (d) Name any one importance of lichen.
  - (e) What is habitat?
  - (f) "Black fever" disease cause by which protozoan?
  - (g) Black rust is caused by which fungus?
  - (h) What are characteristic features of red rot disease?
  - (i) What are the symptoms for malaria disease?
  - (j) What are the symptoms of kala-azar.
2. Describe the following in brief: **2X5=10**
  - (a) Euglenoids.
  - (b) Sex hormones in fungi.
  - (c) Giardia.
  - (d) Late & Early blight.
  - (e) Filaria.

**Section – B**

**Answer all the questions.**

**4X15=60**

**UNIT - I**

3. Explain in detail on thallus organization of micro-algae.

**OR**

Write short notes on the following:

- (a) Dinoflagellateae.
- (b) Economic importance of algae as a food.

**UNIT - II**

4. Explain about structure, nutrition and reproduction of fungi.

**OR**

Write short notes on the following:

- (a) Evolutionary significance of fungi.
- (b) Economic importance of neurospora.

**UNIT - III**

5. Explain in detail on classification of protozoa.

**OR**

Comment on the following:

- (a) Structure of trypanosoma
- (b) Reproduction of Giardia.

**UNIT - IV**

6. Write in detail on serology, disease symptoms and control of Amoe biases and sleeping sickness.

**OR**

Comment on the following:

- (c) Smut
- (d) Serology of Malaria.