



**LJ-513**

**M.Sc. Botany**

**1st Semester Examination, July-Dec., 2020**

**Paper - III**

**Microbiology, Phycology and Mycology**

*Time* : Three Hours]

[*Maximum Marks* : 80

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**Note** : Answer from all the Units and Question Number 1 is compulsory. All questions carry equal marks.

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1. Write notes on the following :

- (a) Gram positive bacteria
- (b) Economic importance of virus
- (c) Diatoms
- (d) Saprophytic fungi

(2)

**Unit-I**

2. Give an account on cyanobacteria.

**OR**

Write notes on the following :

- (a) Economic importance of Bacteria  
(b) Ultra structure of Bacteria

**Unit-II**

3. Give an account on isolation and purification of virus.

**OR**

Write notes on the following :

- (a) Phytoplasma  
(b) Replication of virus

**Unit-III**

4. Describe in brief the structure and reproduction of phaeophyta.

**OR**

Write short notes on the following :

- (a) Asexual reproduction in Vaucharia  
(b) Thallus organization in Chlorophyta

(3)

**Unit-IV**

5. Give an account of Zygomycotina.

**OR**

Write short notes on the following :

- (a) Mycorrhiza  
(b) Cercospora