

9. (a) Discuss and draw the well labelled diagrammatic life-cycle of Rhizopus.
- (b) Symptoms of the disease late blight of Potato.

Roll No.

Exam Code : J-21

Subject Code—52513

B. Sc. EXAMINATION

(Main/Reappear) (Batch 2018 Onwards)

(First Semester)

BOTANY

BOT-101-L (Paper I)

Biodiversity of Microbes, Algae and Fungi

Time : 3 Hours

Maximum Marks : 80

Note : Attempt any *Five* questions. Q. No. **1** is compulsory. All questions carry equal marks.

(Compulsory Question)

1. (a) Who reported Mosaic disease in Tobacco Plant ?
- (b) What is a Plasmid ?
- (c) Name the pathogen of white rust of crucifers.

- (d) Facultative Saprophytes.
- (e) Name the reserve food material in Rhodophyceae.
- (f) Coenobium.
- (g) What is the perfect stage of *Collectotrichum* ?
- (h) Plasmogamy.

Unit I

- 2. With the help of suitable diagrams give structure and reproduction of DNA-Virus (Bacteriophage).
- 3. (a) Define viruses and give its characteristics.
- (b) Write a short note on ultrastructure of Tobacco Mosaic Virus.

Unit II

- 4. (a) Describe the methods of asexual reproduction in bacterium.

- (b) "Bacteria are friends to mankind." Justify this statement.

5. Write short notes on the following :

- (a) Conjugation
- (b) Transduction.

Unit III

- 6. (a) What do you understand by isomorphic type of alternation of generation ? Explain it with reference to the life-cycle of Ectocarpus.
- (b) Heterocysts.
- 7. (a) Describe sexual reproduction in *Volvox*.
- (b) Role of algae in Industry.

Unit IV

- 8. (a) Write a short note on the structure of basidiocarp in *Agaricus*.
- (b) Role of fungi in Agriculture.
- (c) Differentiate between Uredospore and Teleutospore.