Roll No. : .....

Total No. of Questions : **11**] [Total No. of Printed Pages : **3**

BOTASEM–105

M.Sc. (Ist Semester) Examination Dec., 2022

BOTANY

Paper - BOT-101

(Phycology and Mycology)

*Time : **3** Hours*] [*Maximum Marks : **40***

Section–A **(Marks : 1 × 10 = 10)**

Note :– Answer all *ten* questions (Answer limit **50** words). Each question carries **1** mark.

Section–B **(Marks : 3 × 5 = 15)**

Note :– Answer all *five* questions. Each question has internal choice (Answer limit **200** words). Each question carries **3** marks.

Section–C **(Marks : 5 × 3 = 15)**

Note :– Answer any *three* questions out of five (Answer limit **500** words). Each question carries **5** marks.

Section–A

1. (i) Write the pigments and resrve food present in Rhodophyceae.

   (ii) Write any *two* algae which are found in saline water habitat.

(iii) Define algal blooms.

(iv) What is Heterothallism ?

(v) Write the classification of Sargassum.

(vi) Define Mycorrhiza.

(vii) Write a note on Clamp Connection.

(viii) Write a note on Ascocarp.

(ix) Write any *two* antibiotics obtained from Fungus.

(x) What do you mean by Hallucinogenic Fungi ?

Section–B

2. Write a short note on range of thallus organization of algae.

Or

Describe the important methods of asexual and sexual methods in algae.

3. Describe the life-cycle of Anabaena with suitable diagrams.

Or

Describe the salient features of phaeophyta with special reference to sargassum.

4. Write a short note on Heterokaryosis and Parasexual Cycle.

Or

Write a note on algal biofertilizers.

5. Write the characteristics of Zygomycotina.

Or

Explain the life-cycle of any member of Basidiomycotina.

6. Write a note on the role of fungi in industries.

Or

Write a note on Mushroom Cultivation.

Section–C

7. Describe the classification of algae proposed by Fritsch.

8. Describe the structure and reproduction in Acetabularia.

9. Write the general characteristics of Dinophyta and Cryptophyta.

10. Write a detailed note on Deuteromycotina.

11. Write a detailed note on application of mycorrhiza in agriculture and plant growth.