PG CBCS

M.Sc. Semester-I Examination, 2021

BOTANY

PAPER: BOT 195 (PRACTICAL)

Full Marks: 50 Time: 3 Hours

Write the answer for each unit in separate sheet BOT 195.1 MICROBIOLOGY

A. Answer any **ONE** question of the following:

1X15=15

- 1. Write down the principle, requirements, and procedure of negative staining.
- 2. Discuss the principle, requirements, and procedure of Gram staining.
- 3. Write down the principle, requirements, and procedure of the experiment on bioassay of antibiotics.

B. Answer any **ONE** question from the following:

1X10=10

1. Write brief notes on autoclave and incubator.

- 10
- Write down the different inoculation and plating techniques used in microbiological laboratory.

<u>BOT 195.2</u> PHYCOLOGY AND BRYOLOGY

A. Answer any <u>ONE</u> question from the following.

 $15 \times 1 = 15$

- 1. Draw and describe the mature sporophyte structure structure of *Funaria* sp. Write the systematic position of *Funaria* sp. 10+5
- 2. Draw and describe the thallus organization of the class Xanthophyceae. What are the identifying features of the class chlorophyceae? Write the identifying character of phaeophyceac?

 4+6+5
- 3. Compare the thallus organization, reserve food material and pigments content of xanthophyceae and pheophyceae. Illustrate carpospores? 5+5+5

B. Answer any **ONE** question from the following

 $10 \times 1 = 10$

- 1. Draw and describe the vegetative and reproductive structure of *Riccia* sp. 4+6
- 2. Draw and describe the reproductive structures of *Ectocarpus* sp. 4+6