This question paper contains 2 printed pages.

M.Sc. (P) Roll No.

5643 Bio. & Div. of Low. Pla. Cry

M.Sc. (Previous) EXAMINATION - 2022

BOTANY

THIRD PAPER

(Biology & Diversity of Lower Plants Cryptogams)

Time Allowed: Three Hours

Maximum Marks: 100

1. Each theory paper will have 9 questions, out of which a student has to attempt 5 questions and the question No. 1 will be compulsory. The question No. 1 will carry 20 marks and will be of short type of questions with a limit of 20 words.
2. No supplementary answer book will be given to any candidate. Hence the candidates should write the answer precisely in the main answer book only.
3. All the parts of one question should be answered at one place in the answer-book. One complete question should not be answered at different places in the answer-book .

1. Answer the following questions briefly :- 2x10=20
   (a) Name the reserve food material found in the cells of cyanophyceae and Rhodophyceae
   (b) Write the systematic position of Microcystis.
   (c) Name the antibiotic obtained from chlorella.
   (d) Name any two modifications of fungal mycelium.
   (e) Define physiological Heterothallism.
   (f) What is spore-elater division?
   (g) Name three types of prothalli found is Lycopodium.
   (h) Write the systematic position of Plagiochasma.
   (i) Write the name of living members of sub-division psilopsida.
   (j) Write the name of two heterosporus pteridophytes.

UNIT - I

2. Give an account of the habit, habitat and thallus organisation of the algae. 20

OR

3. With the help of suitable diagrams describe the life cycle of Hydrodictyon. 20

UNIT - II

4. Describe the important characteristic features of fungi. 20

OR

5. Write short notes on:- 10+10=20

   (a) Chaetomium

   (b) Polyporus.

UNIT - III

6. Write a detailed account of life cycle of Notothylus with labelled diagrams. 20

OR

7. Write short notes on :- 10+10=20

   (a) Marchantiales

   (b) Development and structure of mature sporophyte of polytrichum.

UNIT - IV

8. With the help of suitable diagrams describe different types of steler system found in pteridophytes 20

OR

9. Describe the development of male and female gemetophyte in Isoetes. 20