- I. Answer any *four* questions. Each question carries 2 weightage.
 - 1. Describe the Pigmentation in major classes of Algae.
 - 2. Enumerate the Ecological importance of Bryophytes.
 - 3. Compare Apospory and Apogamy in Pteridophytes.
 - 4. Explain the reproduction of Ginkgoales.
 - 5. Distinguish between Haplontic and Diplontic life cycles in algae.
 - 6. Explain the Heterospory and Seed habit with example.
 - 7. Enumerate the Economic importance of Gymnosperms.

 $(4 \times 2 = 8 \text{ Weightage})$

II. Answer any *four* questions. Each question carries 3 weightage.

- 8. Explain the Reproduction and Life cycles of Phaeophyta.
- 9. Explain the characters of fossil Bryophytes and their affinities.
- 10. Describe the Reproduction and life history of Jungermanniales.
- 11. Enumerate the contributions of Indian Pteridologists.
- 12. Compare and contrast Rhyniales and Psilophytales.
- 13. Explain peculiarities of welwitschiales.
- 14. Explain the characters of Glossopteridales and evolutionary significance.

(4 x 3 = 12 Weightage)

- III. Answer any *two* questions. Each question carries 5 weightage.
 - 15. Explain the thallus organization and evolutionary trends in Chlorophyta with suitable diagrams.
 - 16. Elaborate the Sporophytic Origin and Evolution of Bryophytes.
 - 17. Explain the Structure and evolution of stele in Pteridophytes with suitable illustrations.
 - 18. Write an essay on the Geological history, Origin and Evolution of Gymnosperms.

 $(2 \times 5 = 10 \text{ Weightage})$

20P128

Time: Three Hours

Name:

Reg. No.....

Maximum: 30 Weightage

(Pages: 1)

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2020 (CBCSS-PG) (Regular/Supplementary/Improvement) CC19P BOT1 C01 - PHYCOLOGY, BRYOLOGY, PTERIDOLOGY AND GYMNOSPERMS (Botany) (2019 Admission onwards)