Name: ..... Reg. No.....

# FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2018 (CUCSS-PG) CC18P BO1 C01 – PHYCOLOGY, BRYOLOGY, PTERIDOLOGY AND

(Pages: 2)

#### GYMNOSPERMS

#### (Botany)

### (2018 Admission Regular)

Time: Three Hours

Maximum: 36 Weightage

## PART A

Answer *all* questions. Each question carries 1 weightage.

- 1. Write a note on columella.
- 2. Explain Bars of Sanio.
- 3. Enumerate the primitive features of Rhynia.
- 4. Compare elaters and pseudoelaters.
- 5. Give an account of diatomaceous earth.
- 6. Write a note on features of cycadoeidales.
- 7. Distinguish between isogamy and oogamy.
- 8. Write a note on palmella stage.
- 9. Maiden hair tree.
- 10. Write a note on unilocular and pleurilocular sporangia.
- 11. Amphiphloic xylem
- 12. Mention the vegetative features of anthocerotales.
- 13. Comment on girdle leaf trace.
- 14. Write a note on the importance of Rhodophyceae.

(14 x 1 = 14 Weightage)

### PART B

Answer any seven questions. Each question carries 2 weightage.

- 15. Explain the asexual reproduction in Chlorophyceae.
- 16. Describe features of Xanthophyceae.
- 17. Briefly describe the gametophyte development in a homosporous fern.
- 18. Enumerate the contribution of Indian pteridologists.
- 19. Discuss the evolutionary significance of Caytonia.
- 20. Explain the characters of lepidodentrales.
- 21. Importance of bryophytes in monitoring air pollution.

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- 22. Note on phylogenetic peculiarities of Isoetales .
- 23. Describe the seed habit in Selaginella.
- 24. Differentiate between meiotic apogamy and mitotic apogamy.

(7 x 2 = 14 Weightage)

# PART C

Answer any *two* questions. Each question carries 4 weightage.

- 25. Briefly explain triphasic haplobiontic life cycle.
- 26. Give an account of the thallus organization of bryophytes in an evolutionary perspective.
- 27. Describe the stellar evolution in pteridophytes.
- 28. Explain the statement "gymnosperms are a connecting link between angiosperms and pteridophytes".

(2 x 4 = 8 Weightage)

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