

**D 93043**

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Name.....

Reg. No.....

**FIRST SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2015**

(CUCSS)

Botany

**BO 01 CT 01 – PHYCOLOGY, BRYOLOGY, PTERIDOLOGY AND GYMNOSPERMS**

Time : Three Hours

Maximum : 36 Weightage

I. Answer *all* the questions briefly :

1. What are globule and nucule?
2. Differentiate between unilocular and plurilocular sporangia.
3. What are gonimoblast filaments?
4. What are hormogones?
5. What is a coenobium? Give an example.
6. What are receptacles and conceptacles?
7. What is rhizophore?
8. What is velum? What is its function?
9. What are gemmae?
10. What are the major economic importance of Gymnosperms?
11. Describe the characters of the ovule of Gymnosperms.
12. How does Gnetales differ from other Gymnosperms?
13. What are 'Bars of Sanio'?
14. List the fern characters of *Cycas*.

(14 × 1 = 14 weightage)

II. Answer any *seven* questions in not more than 100 words :

15. Describe the tetrasporine line of evolution of thallus in green algae.
16. Differentiate between carposporophyte and tetrasporophyte.
17. Write notes on heterotrichous thallus in brown algae.
18. What are the general characters of lycopodiales?
19. Write short notes on : (a) Apospory ; (b) Apogamy.

**Turn over**

20. Describe briefly various asexual methods of reproduction in bryophytes.
21. Differentiate between homosporic and heterosporic ferns giving suitable examples.
22. Explain exosporic and endosporic gametophytes. Give examples.
23. Is Ginko a living fossil? Evaluate.
24. Comment on the affinities of Gymnosperms with Angiosperms.

(7 × 2 = 14 weightage)

III. Answer any *two* questions in 300 words each :

25. With the help of suitable diagrams describe different types of stelar system found in pteridophytes.
26. Describe the structure and development of sporophyte of Anthocerotales with the help of suitable diagrams.
27. Mention the general characteristics of Phaeophyceae and discuss the various types of life cycles seen in this group.
28. Compare and contrast the male reproductive structures of Coniferales and Taxales.

(2 × 4 = 8 weightage)