D 13270 (Pages : 2) Name

Reg. No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2016

(CUCSS)

Botany

BO 01 CT 01— PHYCOLOGY, BRYOLOGY, PTERIDOLOGY AND GYMNOSPERMS

Time : Three Hours Maximum : 36 Weightage

I. Answer the questions very briefly :

1. What are algal blooms?
2. What is the function of heterocyst?
3. Give two examples for symbiotic algae.
4. What is coenobium?
5. What are epiphytic algae?
6. What are gemmae?
7. Distinguish between amphithecium and endothecium.
8. What is peristome?
9. What is protonema?
10. How do you distinguish manoxylic and pycnoxylic wood?
11. What is girdle leaf trace?
12. What is cleavage polyembryony?
13. Comment on the affinities of cordaitales.
14. List the fern characters of Cycadales.

(14 x 1 = 14 weightage)

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

15. Briefly describe the industrial uses of algae.
16. Write notes on : (a) Thermophyte ; (b) Chromatophore ; (c) Akinetes ; (d) Cap cells.
17. What is physiological anisogamy? How does it differ from isogamy and anisogamy?
18. Explain briefly the structure of Synangium.
19. Write short notes on : (a) Polycyclic wood ; (b) Ovuliferous scale.
20. Describe briefly four important characteristics of Bryopsida.

Turn over

21. Write an account of photosynthetic products in algae.
22. Explain spore dispersal mechanism in bryophytes.
23. Comment on the secondary thickening in Gymnosperms.
24. What are the ecological significance of gymnosperms?

(7 x 2 = 14 weightage)

III. Answer any *two* questions in not more than 300 words each :

25. Give an account of the origin and evolution of sporangia in pteridophytes.
26. Explain the evolutionary trends in the sporophytes of bryophytes.
27. Give an account of the range of thallus organization in Chlorophyceae.
28. Describe the order cycadeoidales with special reference to their affinities with angiosperms.

(2 x 4 = 8 weightage)