

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2015

(UG—CCSS)

Core Course—Botany

BO 5B 06—BRYOLOGY, PTERIDOLOGY, GYMNOSPERM AND PALEO BOTANY

(2012 Admission onwards)

Time : Three Hours

Maximum : 30 Weightage

I. Objective type questions. (Include multiple choices, fill in the blanks and answer in a single word)

*Answer all twelve questions.*

Choose the correct answer :

1. Birbal Sahni institute is located at :

- (a) Lucknow. (b) Calcutta.  
(c) Bhopal. (d) Bhilai.

2. Elaters present in :

- (a) Capsule. (b) Gemmae cup.  
(c) Antheridium. (d) Archegonium.

3. Horse tail is : \_\_\_\_\_

- (a) Selaginella. (b) Pteris.  
(c) Equisetum. (d) Psilotum.

4. Endosperm of Cycas is :

- (a) Diploid. (b) Triploid.  
(c) Tetraploid. (d) Haploid.

Fill in the blanks :

5. Sporophyte depending on gametophyte in \_\_\_\_\_ group of plants.

6. \_\_\_\_\_ is heterosporous type of pteridophyte.

7. Cyanobacteria (blue green algae) is seen in the roots of \_\_\_\_\_

8. Remnant of living organisms once existed is known as \_\_\_\_\_

Answer in a word :

9. Needle type leaves present in which plant.
10. Name a fossil Gymnosperm.
11. Protective covering of sorus.
12. Which group of plants is known as amphibians of the plant kingdom.

(12 x 1/4 = 3 Weightage)

Short Answer questions. Answer *all nine* questions :

13. What are the contributions of Indian bryologists ?
14. Sporophyte of Riccia.
15. Synangium.
16. Sporocarp of Marselia
17. Economic importance of gymnosperms.
18. Female cone of Pinus.
19. Stem anatomy of Gnetum.
20. Write notes on Rhynia.
21. Fossil fuels.

(9 x 1 = 9 weightage)

II. Short essay *or* paragraph questions. Answer any *five* questions.

22. Describe the structure of Cycas ovule with suitable diagram.
23. Stellar evolution in Pteridophytes.
24. Asexual reproduction in Pteris.
25. Vegetative features of Equisetum.
26. Give an account of Psilotum.
27. Describe the sporophyte of Funaria.
28. Archegonium of anthoceros.

(5 x 2 = 10 weightage)

**IV. Essay questions. Answer any *two* question.**

- 29. Write an essay regarding the thallus structure and reproduction in Riccia with necessary diagrams.**
- 30. Life history of Selaginella with special emphasis on heterospory.**
- 31. Describe the Salient features of Gnetum.**

**(2 x 4 = 8 weightage)**