Reg. No

MSc DEGREE END SEMESTER EXAMINATIONS - NOVEMBER 2015

SEMESTER- 1, SUBJECT: BOTANY

COURSE: P1BOTT03, BRYOLOGY, PTERIDOLOGY & PALEOBOTANY

Time: Three Hours Max. Marks: 75

- I. Answer **any eight** questions. Each question carries **2** marks.
 - 1. What is a protocorm?
 - 2. What is indusium?
 - 3. What is the common name of *Equisetum* .Why it is named so?
 - 4. Write about morphological nature of spore producing organs of *Psilotum*.
 - 5. What is the genus name of 'Quillwort'. Why it is named so?
 - 6. Write a note on gametophytes of Pteropsida.
 - 7. Write any three important differences between Bryophytes and Pteridophytes
 - 8. Write a note on rhizoids of Bryophytes.
 - 9. Write a note on gemmae of Bryophytes.
 - 10. What are elaters?
 - 11. Briefly explain structure of typical antheridium in Bryophytes.
 - 12. Write a note on peristome.

 $(2 \times 8 = 16)$

- II. Answer **any seven** questions. Each question carries **5** marks.
 - 13. Briefly explain economic importance of Pteridophytes.
 - 14. Explain apospory and apogamy in Pteridophytes?
 - 15. Write an account on heterospory in Pteridophytes
 - 16. Write an account of asexual methods of reproduction in Bryophytes.
 - 17. Give a detailed account on any one important classification of Pteridophytes.
 - 18. Write an account on general characters of Hepaticopsida
 - 19. Give a comparative account of sporophytes in Sphagnales, Polytrichales and Bryales.
 - 20. Describe the external morphology of *Salvinia* and add note on its economic importance.
 - 21. Give the structure of sporangium in *Ophioglossum*.
 - 22. Give an account of algal and Pteridophytic orign of Bryophytes. $(5 \times 7 = 35)$
- III. Answer **any two** questions .Each question carries **12** marks.
 - 23. Write an account of evolutionary trends of gametophytes of Pteridophytes.

OR

- 24. Write an essay on appendages in Bryophytes.
- 25. Write an essay on stelar evolution in Pteridophytes.

OR

26. Discuss gametophytic variation in Bryophytes.

 $(12 \times 2 = 24)$