

Reg. No

Name

M. Sc DEGREE END SEMESTER EXAMINATION - OCTOBER 2019**SEMESTER 1 : BOTANY****COURSE : 16P1BOTT03 : ECOLOGY AND ENVIRONMENTAL SCIENCE, PHYTOGEOGRAPHY & RESEARCH METHODOLOGY***(For Regular - 2019 Admission and Supplementary - 2016/2017/2018 Admissions)*

Time : Three Hours

Max. Marks: 75

Section A**Answer any 8 (2 marks each)**

1. What is emergent property?
2. Explain the significance of fecundity of species in a population.
3. Explain interference and exploitative competition.
4. Define autotrophic and heterotrophic succession.
5. What is biocenosis? Which are the types of biocenoses?
6. Define a floristic province.
7. What is CITES? Explain its significances in biodiversity conservation.
8. What is the function of an biosparger?
9. What is ozone? How is it formed in the stratosphere?
10. What is deductive reasoning?
11. What are the advantages of graphs in research publications?
12. Define Bioethics.

(2 x 8 = 16)

Section B**Answer any 7 (5 marks each)**

13. Limited resources leads to S shaped curves in a typical population, discuss.
14. What is carrying capacity? Is this a static or dynamic measure? Why?
15. Briefly explain the dynamic system of classification of communities by Clement.
16. Explain why tropical rain forests are rich in biodiversity.
17. Explain different types of the floristic kingdom.
18. Discuss about the causes of biodiversity loss. Suggest appropriate measures to prevent biodiversity loss.
19. What is a biodiversity hot spot? Explain its role in Conservation Biology.
20. What is phytoremediation? Explain different types.
21. Describe on the advantages and disadvantages of bioscrubbers.
22. Define research. Why it is said to be a systematic process?

(5 x 7 = 35)

Section C**Answer any 2 (12 marks each)**

23. Write an essay on species interactions in community. With suitable examples explain how these interactions play an important role in the community stability.

OR

24. Write an essay on conventions, policies and other efforts on biodiversity and its conservation on a global and national level.
25. Describe the role of bioreactors in waste management.

OR

26. Write an essay on the preparation of presentation material based on your MSc dissertation, both oral and poster, for a national conference and explain how you can successfully present the same.

(12 x 2 = 24)