

Reg. No

Name

18P134

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

Time : Three Hours

Max. Marks: 75

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

1. What is emergent property?
2. Explain logistic model of population growth.
3. What is character displacement? Explain the causes that leads to character displacement.
4. Distinguish allopatric and sympatric distribution.
5. What are neoendemics?
6. What is an endangered species? Give examples of any two endangered plants of Kerala.
7. What is the function of a biofilter?
8. Define polar vortex.
9. What are the objectives of Hazardous Waste (Management and Handling) Rules, 1989?
10. What is a style manual?
11. Differentiate a dissertation and Reserach report.
12. Define Bioethics.

(2 x 8 = 16)**Section B****Answer any 7 (5 marks each)**

13. Briefly explain the factors affecting population growth.
14. Limited resources leads to S shaped curves in a typical population, discuss.
15. What are the importance of succession in restoration ecology.
16. Explain why tropical rain forests are rich in biodiversity.
17. Explain different types of floristic provinces of the world.
18. What is a biodiversity hot spot? Explain its role in Conservation Biology.
19. Describe on the advantages and disadvantages of bioscrubbers.
20. Explain the role of bioreactors in sewage treatment.
21. Explain different levels of observation in scientific research.
22. Explain the role of bioethics in research experimentation.

(5 x 7 = 35)

2 of 2
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 the role of IUCN in the conservation of ecosystems and biodiversity.

25. Explain on the aims and work plan of all UNFCCC annual environment summits.

OR

26. Explain different steps involved in research process and mention the significances of each step.

(12 x 2 = 24)