

Reg. No

Name

19P2007

MSc DEGREE END SEMESTER EXAMINATION - MARCH/APRIL 2019

SEMESTER 2 : ZOOLOGY

COURSE : 16P2ZOOT05 : ECOLOGY - PRINCIPLES AND PRACTICES

(For Regular – 2018 Admission and Supplementary – 2017/2016 Admissions)

Time : Three Hours

Max. Marks: 75

Section A

Answer any 8 (2 marks each)

1. Comment on the elements of a cybernetic system.
2. Comment on niche width and niche overlap.
3. Differentiate fundamental and realized niche
4. Define the terms: denitrification, ammonification and nitrification.
5. Comment on ecological pyramids.
6. Write a note on territoriality
7. Differentiate between physiological natality and ecological natality
8. Comment on Gause's principle
9. Differentiate between autogenic succession and allogenic succession
10. Briefly describe the finite nature of natural resources
11. Briefly explain Energy Audit
12. Write notes on soil formation

(2 x 8 = 16)

Section B

Answer any 7 (5 marks each)

13. Briefly describe types and causes of character displacement
14. Write notes on resistance and resilience stability.
15. Comment on Host as Habitat concept
16. Comment on primary productivity and its measurements.
17. Briefly discuss life table and survivorship curves
18. Differentiate between r and k selection
19. Give an account of the structure of ecological communities
20. Write a note on the trends expected during the course of autogenic succession of ecosystems
21. Write notes on the physical and chemical properties of soil
22. Explain Green Technology and sustainable development

(5 x 7 = 35)

Section C

Answer any 2 (12 marks each)

23. Write notes on the concept of homeostasis with special reference to the cybernetic nature of an ecosystem.
24. Give an account of biomass and productivity measurement
25. Discuss the concept of meta population
26. Write an essay on Conventional and non-conventional Energy resources

(12 x 2 = 24)