QP CODE: 26022447

26022447

Reg No : .....

Name : .....

M Sc DEGREE (CSS) EXAMINATION, MAY 2026

Second Semester

M Sc ZOOLOGY

CORE COURSE - ZL010201 - FIELD ECOLOGY

2019 ADMISSION ONWARDS

9B28069C

Time: 3 Hours Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. What is Countercurrent heat exchange?
2. Write down the importance of detritus feeding in ecosystem.
3. What is stochastic extinction?
4. What is social dominance?
5. The action of penicillin which inhibits the growth of bacteria is a classic case of allelopathy. Explain allelopathy and its effects on organisms.
6. What is optimal diet and foraging efficiency?
7. Comment on liquid wastes and sewages.
8. What are Ramsar sites? List 3 Ramsar sites in Kerala.
9. Write a note on green technology.
10. What is EIA?

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. How do plants and animals depend on each other for oxygen and carbon dioxide?
12. Write a short note on animal adaptations to light environment.
13. Explain how density dependent and density independent factors affect population growth.

14. Explain Richard Levins's model of metapopulation.

15. There are wide range of antipredator strategies that prey exhibit, from chemical defences to warning coloration, camouflage and mimicry.

    1. How Batesian and Müllerian mimicry differs? Give examples for each.
    2. Explain the different types of prey defence mechanisms with examples.

16. Explain the various types of defence against parasites by host.

17. Explain the use of bioscrubbers and its process.

18. Write a short note on ecosystem modelling.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Explain the concept, structure and function of ecosystem.

20. Explain the properties of population ecology.

21. Describe mutualistic relationship of human with crops.

22. Write an essay on sources and types of solid wastes.

(2×5=10 weightage)